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Allied Health Clinical Education Affiliations: A Study of Medical Technology, Occupational Therapy and Physical Therapy Programs

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ALLIED HEALTH
CLINICAL EDUCATION AFFILIATIONS:
A STUDY OF
MEDICAL TECHNOLOGY, OCCUPATIONAL THERAPY AND PHYSICAL THERAPY PROGRAMS

by

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The purpose of this national study was to identify areas at issue in curriculum, ethical and legal, financial, and administrative clinical education concerns and practices as perceived by administrators of all university-based Medical Technology, Occupational Therapy and Physical Therapy programs and administrators of clinical facilities providing clinical experiences to students from academia.

A total of 661 surveys were mailed with 221 sent to academia and 440 to clinicals. The usable return rate was 431 (65 percent) with the following distribution: MT academia 57 (80 percent) and clinicals 79 (56 percent), OT academia 39 (72 percent) and clinicals 74 (69 percent), and PT academia 64 (67 percent) and clinicals 118 (62 percent).

Descriptive statistical analyses were completed on survey responses to determine the frequency and percent frequency distribution. The criterion used for identifying "meaningful" differences in the perception of academic and clinical program administrators was set at a minimum difference of 20 percent in the percent frequency between responses to the survey questions. In instances where meaningful differences were noted, the concern or practice was considered an "item at issue."

There was seen in almost all questions of an administrative nature agreement except issues of intra-institutional accountability, matters related to staffing and confusion as to the responsibility for establishment of policies governing clinical education. The areas at issue in curriculum focused on responsibilities associated with the establishment of goals and objectives, clinical activities, success criteria, assessment tools, assignment of clinical grades, and assessment of the quality and effectiveness of the clinical education component. With regards to fiscal items at issue, practitioners were less interested in payment for clinical instruction at the institutional level than they were in non-monetary forms of assistance. In addition, educators seem to be much more sensitive to future financial concerns than do practitioners. The ethical and legal items at issue related to areas in which policies were not clear and in which there has not been adequate communication.

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VITA

The author, Karina Sabina Srugys, is the daughter of Pranas and Brone Srugys. She was born October 23, 1942 in Lithuania.

Ms. Srugys graduated from the Chicago public school systems in June of 1960. She entered the University of Illinois in September, 1960, and transferred to the Roosevelt University pre-medical technology program in 1962. During this period, the author completed her medical technology internship at Little Company of Mary Hospital in Evergreen Park, Illinois, and in 1965, received her baccalaureate degree in Medical Technology from Roosevelt University. In July of 1975, she received her Master of Arts degree in Allied Health Education from Governors State University, Park Forest South, Illinois.

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Introduction

In the last decade, many societal changes have taken place exerting tremendous pressures on the delivery of health care and influencing allied health education. Some of the more commonly cited factors are the changing population characteristics and environmental influences, changing disease patterns, burgeoning medical technologies, and diminishing availability of financial resources attributable to various governmental and regulatory interventions in a period of limited resources. These factors are further compounded by the public's general lack of awareness and appreciation of the impacts.

Within the field of allied health, the perceptions of clinical education as identified by administrators of both academic programs and clinical facilities affiliated with these academic institutions appear to be significantly different. As a result, clinical experience arrangements are subject to strained relationships jeopardizing collaborative efforts. Frequently, problems of collaboration arise in instances of perceived differences. The identification of perceptual differences among academic and clinical administrators addressing curricular-related issues, ethical and legal issues, fiscal issues, and administrative issues for Medical Technology, Occupational Therapy and Physical Therapy

programs will be undertaken. The study will provide information to educators and practitioners that will facilitate the recognition of issues and concerns in a concerted effort of maintaining and optimizing present arrangements and strengthening future relationships.

Background

Major changes in population characteristics and environmental influences in the United States will have a significant impact on health care in the 1980s. The birth rate of the U.S. has been dropping, 25.2 births per thousand in 1957, 14.8 in 1973, and 15.9 births per thousand in 1981. Even so, the 1981 U.S. census cited a figure of 226 million people residing in the United States. This along with increased life expectancy, currently 71 years, means that the population is growing older. In 1950, approximately 8 percent of the population was age 65 or over. Today the number is approaching 11 percent with further increases projected.[1,2] The decreasing birth rate coupled with increased longevity indicates a need to exercise caution in further expansion of health care facilities and services and to examine the members and kinds of personnel needed to provide adequate services.

Another important factor influencing the dimensions of health care is the effect of demographic change. Life styles and economic circumstances, coupled with the greater mobility that springs from improved communication and transportation, are bringing population shifts in both urban and rural areas. These changes are requiring different patterns of health care delivery and delineating competency levels among health workers. A better educated and more affluent population will have

higher expectations of the health care system and will make more demands. Modifications in current practices lead to credentialing of quality health care practitioners, therefore, qualifications will need to be reviewed and, if necessary, adjusted to be compatible with changing needs.[3, 4]

At the same time that scientific progress resulted in the elimination of certain infections and contagious diseases as primary causes of morbidity and mortality, social changes and life styles had an impact on selected disease patterns which affected the delivery of health care. [5] The changing life styles and social habits are resulting in a decrease in communicable diseases and increased disease of social etiology. The health care providers monitoring changing social components within the external environment may find new demands on its stretched resources.[6]

Scientific and technological components are significant factors in health care delivery systems. Cost of health care has risen astronomically and in far greater proportion than the cost of living index. In 1929, when economic data of this sort were first collected, the U.S. population was spending a total of about $3.6 billion in the health sector which constituted some 3.5 percent of the gross national product. In 1980, $250 billion was spent in the U.S. health industry (private and public) which amounted to 9.4 percent of a greatly enlarged gross national product. This figure was an average expenditure of about $1,000 per person per year.[7] The scientific and technological investments provided the technological imperative but drove up costs to a point that they exceed the percentage of total gross national product of every nation in the world but six.[8] This fact has caused Congress,

insurance companies and other private groups to exhibit a keen interest in the effectiveness of U.S. health care delivery systems.

Inherent in the growth of the health care system is the consumer demand that all health personnel demonstrate technical competence as well as compassion and sensitivity to patients' needs, coupled with the economic demand that competence and sensitivity be achieved at the least possible patient and public cost.[9] Therefore, pressures are being exerted on academic institutions to prepare competent, qualified and sensitive practitioners. Increased technology has traditionally led to increased specialization. However, the trend for increased specialization is being challenged regarding the efficacy of proliferation of specialties each with its own separate requirements for accreditation of educational and clinical programs and the certification of practitioners.[10]

However, few individuals would deny that in most instances standards of health care services are raised and maintained as a result of accreditation and certification. There is still a concern as to whether or not the resulting cost to organizations, and ultimately to the consumer is worth the benefit. Further, the unusally high cost and variety of health care services have produced a clear demand for more vigorous regulatory actions operating at the national, state, and local levels.[11] Costs have increased so much that the average consumer can no longer afford to "buy" health services directly. The use of third party payers for financing health care has not only increased but has become a way of doing business in health care systems.[12] The main effects of the regulatory component upon the financial management of a health care

organization are on the amount and use of services offered. Many of the effects of changes in the regulatory component on local providers stem from the passage of Medicare and Medicaid legislation. The decision of Congress to fund Medicare and Medicaid changed the patterns of health care funding as well as the internal management techniques employed by many health care organizations.[13]

In 1978, of all money spent in the U.S. health sector, 92.5 percent went for personal health services, in comparison of 33 percent in 1967 and 21 percent in 1965.[14] Expenditures for personal health services come from the following sources: 38.7 percent from government (federal, state and local), 27 percent for voluntary health insurance, 1.4 percent from other social sources such as philanthropy, and 32.9 percent from private individuals and families.[15] If these sources are aggregated as "social" versus "private," it is clear that two-thirds of health care financing comes from the social and only one-third from the private. The social reimbursement agencies have thus gained the ability to influence the decisions of those individuals and/or groups who conduct business with medical institutions.[16]

During the 1970s, societal reactions were predictable; two were very significant. The first was the reduction of federal investment. Medical programs were amended; Regional Medical Programs were repealed; construction money for hospitals and health profession schools dried up; support grant for health profession education were cut back; and the research establishments were no longer permitted to grow. Secondly, the extraordinary escalation of the costs of illness provoked a response that took the form of regulation and control. Comprehensive Health

Planning was replaced with the Health Planning and Development Act; health maintenance organizations (HMO) were introduced;[17] hospital rates were increased; certificates of need (CONs) arrived; and by the end of the Carter administration, revenue caps on hospitals were proposed.[18] The overall priority for the nation was spelled out in Public Law 93-641: quality health care should be available, accessible, and affordable to all.[19, 20]

The emphasis on quality of care brought other concerns, such as the cost of care, and the responsibilities linked with providing these services. The main effects of the regulatory components influenced the financial management of health care organizations. These effects are being translated into cost containment programs. Concerned with the impact of the trend toward cost containment, and in an effort to reduce costs while providing quality health care services, health care facilities offering clinical experience programs have become especially vulnerable. However, the delivery of health care services depends on many resources of which skilled and appropriate personnel are doubtless the most important.[21]

A great bulk of the United States health expenditures goes to support a vast and expanding establishment of health personnel--some 6.7 million in 1978.[22] The importance of allied health as a provider of employment is that allied health occupations comprise over three million allied health workers representing nearly 57 percent of the entire health work force.[23] Most people are not aware that the health sector employees are the second largest employee group, after local government employees, in the United States.[24]

The allied health occupations are extremely heterogeneous and personnel work at various multidisciplined levels. The technologists, therapists and technicians comprise a wide variety of health professions which work collaboratively with other medical and health related professionals. At the turn of the century, approximately one person in three working in health care delivery was a physician. At the beginning of the 1980s, the ratio approximates sixteen non-physicians to each physician working in some aspect of health care.[25, 26] It is apparent from this ratio that the responsiveness of the educational system and the market's demand for new health personnel is impressive; even more so, when one realizes that many of these allied health workers have to undergo extensive pre-employment training.

Up to the mid 1960s, employers were the primary trainers of allied health manpower. Hospitals had no alternatives but to undertake the training of these individuals to assist physicians. However, this traditionally established training pattern was radically altered in the 1960s with the introduction of junior and community colleges whose primary claim for public financing was to provide students with a "salable" skill. The infusion of new money precipitated an increased demand for health workers which supported the community college movement.[27]

Some of the educational leaders of allied health were convinced that the quality of student preparation could be significantly improved if training were centered in university health sciences centers and therefore urged their state and the federal government to support this movement. They argued that the university would provide an environment

conducive to the training, not only of allied health manpower, but of all health professionals.

This expansion movement at both junior and senior colleges appeared attractive for other reasons. Young Americans were desirous of obtaining college degrees while at the same time strengthening their professional preparations for the labor market. The movement of education for allied health manpower out of the hospital into academic setting appeared to provide an optimal solution. Freed of the necessity to provide complete training of a wide array of allied health specialists and technicians, health care facilities were agreeable to supporting the provision of clinical experience sites for the newly burgeoning college based programs.

In 1980, the latest year for which comparable survey information exists, there were about 11,600 formal post-secondary programs preparing 202,000 allied health personnel. Based on the survey, 60 percent of the programs or 72 percent of the graduates of allied health were housed in collegiate settings; 28 percent of the programs or 17 percent of the graduates were in hospitals; 11 percent of the programs or 10 percent of the graduates were in post-secondary non-collegiate institutions; and about 1 percent of the programs or graduates were in the armed forces.[28] These numbers reflect the significant size of the allied health education enterprise in the United States and the extent to which collegiate training of allied health manpower has come to dominate both with respect to numbers of programs and graduates.

An understanding of the concept of allied health personnel is essential before addressing the effect of changes on allied health and

allied health education. Allied health received its formal statutory introduction with the passage of the Allied Health Personnel Training Act of 1966. Although there is no universally accepted definition of "allied health," the 1980 National Commission on Allied Health Education recognized and the Board of Directors of the American Society of Health Professions adopted the following definition:

> The term allied health personnel means individuals trained at the associate, baccalaureate, masters, or doctoral degree level in health care-related science, with responsibility for the delivery of health care-related services (including services, health promotion, rehabilitation, and health systems management), but who are not graduates of schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, chiropractics, pharmacy, or nursing.[28]

The above definition masks the fact that the term "allied health" includes a substantial number of job classifications. As health needs change and as new scientific knowledge is acquired, the classification and education of the allied health personnel are inevitably modified.[29] Colleges are continually assessing and revising programs and curricula to address changes in health demands. Since college enrollments are declining primarily because of a decrease in the traditional college-age population, competition for students is increasing. Coupled with a decrease of tuition dollars and federal support, academic institutions must address their own financial survival with a critical assessment of program offerings. However, the allied health programs can justify their existence since the allied health fields are acknowledged to be growth areas with excellent employment opportunities upon graduation. In fact, the Bureau of Labor Statistics has summarized factors which predict favorable employment outlook for the allied health fields in

general. These factors include population growth trend on an incline with an aging population; increased interest in rehabilitation services; increased societal health conscientiousness; increased utilization of services; growth of group practices; HMOs and other extended care facilities; increased insurance and financial coverage; greater awareness and acceptance of allied health personnel; and the growing complexity of management and information systems requiring specialization.[30]

Although health profession personnel demand will increase at a slower rate in the future than it has in the past decades, the outlook for increased utilization of allied health professionals appears bright. Cost containment concerns will influence utilization and numbers of allied health personnel in expanded functions and roles, particularly for tasks which can be performed most cost-effectively by allied health personnel than by other professionals. However, tradition and economic issues written in laws, as well as regulations and reimbursement policies often present barriers to optimal utilization of non-physician personnel.

The impact of cost containment may well be the relative reduction of the number of allied health practitioners in some settings. Since this move may further reduce the ability of facilities to serve as clinical centers, the increased need for collaboration and cooperation among educational programs and clinical facilities is obvious. What will be needed are role delineation studies to determine appropriate roles among health professionals and to link education with clinical practice requirements and roles. Already the Federal Trade Commission

is challenging the elitism of self-interest groups and is questioning whether certification is being used in the name of quality assurance for economic rather than patient-care purposes.[31] Regardless of the motivating factors that bring a college/university and a clinical setting together to pool their resources, which may be interests and energies for the education of students in the health professions, there should always be the recognition that the two institutions exist primarily for the improvement of health care of the public.

The expansionist era of educational programs for health professions is over. Proliferation of programs in educational institutions during the 1960s and 1970s has given way to increased collaborative arrangements between educational institutions and clinical facilities. Frequently cited rationale for this movement include the following: greater availability of science and social science courses, greater assurance of program quality and high standards; greater prestige for graduates of collegiate programs; and the growing conviction of educators that training founded on hospital-based apprenticeship was frequently ineffective for students, unfair to the patient, and frequently difficult to justify to third-party payers.[32]

The shift to the collegiate settings brought a distinct demarcation of clinical and didactic education and focused on some critical issues. The more mutually recognized issues are: the value of theory versus practice; "service" versus "education"; financial support, viability, and demands; moral and legal responsibilities; curricular concerns; and the expanded administrative responsibilities.[33,34,35] These issues are further complicated by the effects of the influences,

stresses, and concerns of regulatory and professional agencies as well as the needs and interests of the larger educational institutions.

The concept of collaboration among institutions is not a novel one for allied health professionals. Collegiate programs have been entering into agreements with clinical facilities providing blocks of time assigned to clinical practice for students from academia. These clinical experiences involve the scheduling of students to participate during specific times in planned activities providing students with opportunity to apply academically-acquired knowledge in an actual work situation applicable to their field of preparation and under the supervision of qualified, competent service related personnel. Emphasis is on gaining skills and attitudes, and dealing with a variety of situations that are likely to be encountered on the job that cannot be simulated in classroom settings. Blayney and Cohen cited the following benefits for this type of arrangement: that the use of existing resources is more efficient than duplication of resources; that joint planning and sharing of experiences can lead to more effective educational processes; and that sharing learning collaboration in practice is essential in today's complex health delivery system.[36,37] The value of the allied health concept for clinical education lies in the assumption that there exists, among diverse groups, a commonality of objectives as well as a sense of teamwork, and implicit is the expectation that there is or should be a sharing of learning experiences and opportunities. However, the administration and legal entanglements with this type of arrangement are numerous and complex.

Difficulty in sustaining meaningful communications has been identified as one of the major problem areas along with costs and scheduling of assignments.[38,39] Since the primary commitment of most service facilities is to the delivery of patient services, learning activities frequently vary greatly with the workload. Nevertheless, patient care is and must remain the primary concern for the clinical facility. The needs of the educational institution must not obstruct the work flow, only complement it.

The use of simulated laboratories has changed the amount of time spent in the "service" facility by focusing attention on the unique learning activities that are peculiar to a work environment and which cannot be simulated. In the clinical setting, students have an opportunity to apply knowledge of methodology and theories gained in the academic setting, and are given the opportunity to adapt to various work situations. As simulated laboratories gain popularity, their role in allied health education will address several crucial issues and resolutions, such as, less dependence on the service facility to provide all of the cognitive and psychomotor skills; greater assurance that each student will experience at least a "minimum" of controlled and standardized learning experiences; and, finally, greater opportunity to maximize learning experiences and activities peculiar to clinical facilities.[40] This concept is compatible with the philosophy of an academic institution to provide the learner with broadened and varied learning experiences which can be used to adapt to particular situations. Regardless, superseding all philosophical needs and interests, professional program

accrediting agencies mandate the inclusion of a clinical component in the program.

In the 1970s, the National Commission of Allied Health Education conducted an informal, open-ended survey of directions of allied health programs in colleges and universities regarding their major problems. The major concerns of the 91 community colleges and the 109 four-year colleges and universities clustered in the areas of: identity of the profession, and ultimately of the professional; credentialing of the professionals; funding of allied health programs; the roles of educational settings; clinical affiliations and other interinstitutional concerns and arrangements; curriculum; and issues and concerns regarding students, faculty and administration.[41]

Some concerns were very closely interrelated and therefore overlapped in more than one category. For example, funding issues were again identified; high cost of maintaining an educational program often complicated by high costs of affiliation; questions of who should pay for the commodities and supplies used for teaching purposes at the clinical facility; the additional service costs due to student utilization of equipment and instrumentation; and who would pay the clinical staff whose primary function is patient service.[42,43] For still others, a question of administrative control over training and education programs of the students is crucial if the clinical facilities are reimbursed. Concerned with the trend toward cost containment and the need to reduce costs, health care facilities providing educational programs are especially vulnerable. Therefore, academic institutions are expected to assume the cost of clinical training.[44] The perceived advantage

of academic institutions assuming this cost is that this arrangement permits the educators some control over the quality, quantity, and delivery of instruction.[45] Looking to the future, one wonders who will ultimately pay for clinical education.

Traditionally, arrangements between academic institutions and the clinical facilities involve no monetary exchange. However, clinical facilities are beginning to challenge this type of agreement.[46] In fact, this trend has been encouraged by some of the professional societies, whose interest is to protect students from exploitation by both academic and clinical facilities. There are still other factors that have significant impact. The unsolicited interest of third party payers and the emphasis on cost containment in health care delivery systems are part of a demand for accountability in which all costs will have to be justified.[47]

In order for these decisions to be optimal in terms of quality, effectiveness, and economy for both allied health care delivery systems and educational facilities that train allied health manpower, it will be necessary to implement fundamental reforms in the organization and use of our health care resources.[48]

The push for financial arrangements between academia and clinical facilities is slow in coming, and has previously received minimal public attention from either party. The colleges and universities have not been particularly interested in identifying clinical educational costs for obvious reasons. The health care facilities have not analyzed costs for a variety of reasons. Traditionally, departments did not share education costs as line items in the budget, and "unlimited" funding was

automatically provided in response to perceived community service needs. Besides, the department provided health care services with the appropriate clinical staff members whether or not students were present.[49] Although students occupy space, use facilities and supplies, and of course, require the time of staff members to teach students, they also carry a share of the workload, which may offset the cost of clinical education.[50]

In addition, health care administrators feel that participation in teaching activities associated with academia bring a variety of intangible benefits. Specifically, the academic faculty frequently are available for consultation bringing in new information gained from research and other sources; students seem to influence increased participation of the clinical staff in continuing education activities and provide the motivation for the maintenance and upgrading of professional skills.[51] This last point is important because it directly relates to the management and personnel practices concept of employee motivation and stress.[52] Another significant perceived contribution is that educational programs provide a constant source of new employees who need a shorter job orientation period. Further, the fact that students can eventually be hired on a part-time basis as they progress through their educational program should not be overlooked. Reduced advertising and recruiting costs are ancillary benefits.[53] Each of these perceived benefits is difficult to measure, which contributes to the lack of research in this area.[54] Interinstitutional collaboration is not just a fad that will go away. Many professionals feel that utilization of this type of arrangement for clinical enrichment and competence is one of the

most meaningful components of the program. Collaborative efforts have not been without problems and challenges. The involvement of clinical facilities as an integral part of the health care education system has introduced many complex moral and legal issues.[55.56] For example, a negligent act of an allied health student causing injury to a patient while in a clinical setting poses a most confusing problem.[57] The critical issues center on who is responsible for and has control over the student practitioner; the academic institution that may not have properly prepared the student, or the clinical site that may not have been adequately selective in choosing the student practitioner.[58] It is incumbent upon all academic and clinical health professionals to acquire a general knowledge of the potential legal hazards associated with their professions when dealing with associates, patients/clients, and in the day to day delivery of health care. The many risks of liability can be greatly minimized through the understanding of the legal concepts.[59]

Malpractice litigation has become one of the most significant constraints affecting the health care system. It has been estimated that hospitals have been named in as many as 39 percent of all malpractice claims filed. This increased litigation can be attributed to consumer awareness, impersonal complexity of the health care system, patient rights revolution, and high expectations in a sophisticated society. The interface between law and medicine has been growing at an unprecedented rate in recent years, leaving professionals confused about their rights and responsibilities.[60]

Historically, interinstitutional collaborations for clinical education were traditionally handled informally. However, there is a

strong movement toward more formalized procedural mechanisms.[61] The significance of affiliation agreements has resulted in a sizable body of literature. While this literature provides a framework for writing affiliation agreements, it does not specifically focus on affiliation agreements in allied health, nor does it document the nature and content of existing affiliation agreements. However, a comprehensive study conducted in 1972 by Moore and associates recommended a process for developing affiliation agreement documents and also identified crucial content concerns such as the degree of supervision, curriculum, evaluation, schedules, legal issues, remuneration arrangements, duties, responsibilities and authority, and liability coverages.[62] There is consensus that written agreements strengthen relationships between the parties by clarifying situations, improving understandings, and solidifying arrangements so that there is a better exchange of promises and more syntheses in the inherent activity and future arrangement.[63]

With few exceptions, allied health educational programs are now carefully controlled through the process of program accreditation. Although the programs are guided by the Essentials, misunderstandings arise from interpretations of these Essentials and a lack of inter-institutional communication.[64] Because the degree granting institution receives the formal accreditation, it may attempt to dictate curricular goals and objectives to its affiliates without considering mutual benefits. For example, literature focusing on curricular arrangements, content, and accountability of clinical education in the allied health reveals that both the learners and the educators appear dissatisfied with the attempts to relate the classroom activities with the "real

world" experiences. Students complain that they are being used for cheap labor while the clinical staff lament of the lack of technical skills found in students trained in the more "old school" or traditional fashion. There is some evidence that the academic institutions are producing a breed of pre-professionals that are over-educated in theory and undertrained in applicable skills.[65]

The dissatisfaction of clinical facilities may be due to a lack of understanding and appreciation of curricula and curricular-related issues. Despite the bombardment of massive quantities of content on the allied health professional, not all knowledge or activities need be included in the curriculum to produce a competent and certificable professional. All participants should be cognizant of the clinical education's aims and goals, objectives, content, learning activities, and evaluation mechanisms as they relate to the broader aims of a total curriculum.[66]

Central to curricular issues and the effectiveness of affiliation is the extent and balance of interaction and influence between the academic institutions and their affiliates. Each party brings into the affiliation their own set of organizational resources, body of knowledge, competency levels, and objectives. Academic and clinical program administrators should be aware of their own resource needs and expectations so that mutually beneficial interactions can be perpetuated. Furthermore, both the academic and clinical facility administrators should be cognizant of the central mission of the institution, and endeavor not to infringe but accommodate the goals of each other.[67,68]

Collaborative interinstitutional arrangements hold great promise for allied health education. Problems of collaboration are hardly specific to allied health education but are endemic to academia. Since mutually effective collaboration requires commitment, communication, negotiation and compromise on the part of both parties, therefore, the administrator of both academic and clinical facilities must be aware of trends and issues in health care and allied health education, and take an active role in the addressing of these issues.

Purpose of the Study

The purpose of this study was to identify areas at issue in clinical education curriculum, ethical and legal, financial, and administrative matters as perceived by administrators of Medical Technology, Occupational Therapy and Physicial Therapy and administrators of clinical facilities providing clinical education experiences to students from academia.

Research Questions

The study will attempt to provide answers to the following research questions:

1. Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the curricular issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

2. Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the ethical and legal issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

3. Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the fiscal issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

4. Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the administrative issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

Description of Terms

The following descriptions are derived from the material presented by Moore and Perry in Clinical Education in Physical Therapy: Present Status/Future Needs, (1976).

Clinical Education

Clinical education is the portion of a structured educational program that is provided in a health care facility and that is usually specifically related to prior or ongoing didactic education. In some instances, the terms directed clinical experience/fieldwork/practicum

may be more appropriate than clinical education. Although a sharp distinction cannot be made between clinical experience and clinical education, the word "education" implies major focuses on gaining knowledge, skill, and aptitude through instruction, whereas the word "experience" implies that the major focus is on gaining knowledge, skill aptitude through direct participation in events.

In any event, the terms refer to the planned learning experiences assigned as an integral part of or complement to didactic courses. These experiences are designed to provide initial and basic experiences in direct observation and then in participation in selective practical activities, under the supervision of qualified, competent personnel.

Clinical education and/or experience involves scheduling students to participate during specific blocks of time in planned activities that provide them with opportunities to apply academically-acquired knowledge in an actual work situation applicable to their field of preparation. Emphasis is on gaining skills and performing the basic procedures used in the occupation and on dealing with a variety of situations that are likely to be encountered on the job.

Clinical Instructor

The hospital/agency clinical instructor is employed by the clinical facility and may be given a title or clinical appointment at the rank of instructor or higher by the academic institution. This instructor may receive some monetary and/or tangible or intangible benefits from the academic institution. The major responsibility of this position includes the instruction, supervision, and evaluation of the

clinical education of the students. These duties may be delegated to another staff person. Individuals in these positions usually work closely with the coordinator of clinical education, director of the educational program, hospital/agency coordinator for clinical instruction, or some designated faculty member in establishing the elements of the clinical education program. This individual may also participate in the didactic portion of the educational program.

Coordinator of Clinical Instruction

The coordinator of clinical instruction is generally a faculty member employed by the academic institution. In some institutions, the term "education" is substituted for "instruction."

The primary role of the coordinator of clinical instruction is to coordinate and administer clinical education programs. The coordinator interacts with the academic faculty and with the staff or designated individuals of affiliating institutions to plan, coordinate, and evaluate each student's clinical education program, taking into consideration the academic preparation of the student and his or her previous experiences. Additional responsibilities include writing contracts and agreements, developing new and reviewing existing affiliations, orienting students to the clinical facility and experiences, and counseling students in clinical segments of their programs.

The hospital/agency coordinator for clinical instruction is employed by the clinical facility to coordinate and arrange the clinical education of students assigned to the facility. This coordinator may function for one or more disciplines; may or may not have other respon-

sibilities; and may or may not have an appointment, title, or a designated role in the educational program or institution. Frequently, chiefs of services assume the role of coordinator of clinical instruction in their service area. This is especially true when small numbers of students are involved.

For some programs, the coordinator's role is assumed by someone designated by the administrative officer. Programs administered in this manner are generally in a developmental stage. The college faculty negotiate with the hospital administration for specific types of clinical experiences. The responsibility for the students' clinical experience is usually delegated.

Essentials

Essentials are the minimum standards by which educational programs are reviewed, surveyed, or evaluated for purposes of accreditation. Essentials tend to be general statements so that they may be widely applicable to varieties of programs and yet avoid provisions that may be seen as arbitrary. Essentials also incorporate terms requiring mandatory conditions or actions such as must, will, shall, require, etc. Revisions to Essentials are usually effected within a five year period.

The following descriptions are derived from "Essentials" located in the 10th edition of the Allied Health Education Directory.

Medical Technologist

The medical technologists may be a generalist who works in one or more laboratory fields, including clinical chemistry, hematology, blood

banking, immunology, immunohematology, microbiology and nuclear medicine. The medical technologist is expected to be able to use a high degree of independent judgment in developing, performing and evaluating laboratory prcedures.

Education for medical technologists is on the baccalaureate degree-level and leads to a bachelor of science degree. Many colleges and universities that offer medical technology programs offer the so-called "3 + 1" type. In these programs, the student takes three years of prescribed pre-clinical courses on the campus and one year of clinical training in an accredited hospital program. At the end of the successful completion of the year of clinical courses, the student is awarded a baccalaureate degree by the college or university. Other colleges and universities, often those associated with medical centers, offer integrated programs, sometimes referred to as the "2 + 2", non-traditional, or university-based programs. Integrated programs offer both the pre-clinical and clinical courses, theory and practice, in a step-like fashion during the last two years or so of the curriculum. At the completion of an accredited baccalaureate program in medical technology, a student is eligible to take the certification examinations offered by several national certifying agencies.

Occupational Therapist

An occupational therapist evaluates the self-care, work and leisure skills of well and disabled clients of all ages; plans and implements programs and social and interpersonal activities designed to restore, develop, maintain the client's ability to satisfactorily

accomplish daily living tasks required for that person's age and occupation. Occupational therapists evaluate and treat problems that result from physical illness or injury, emotional disorders, congenital or developmental disabilities, or the aging process.

Programs entail four years of college or university preparation leading to a baccalaureate degree. Post-baccalaureate programs leading to certificate or masters degree are also offered. Curricula of accredited programs are required to include basic sciences, the human development process, specific life tasks and activities, health and illnesses, and occupational therapy theory and practice, which include a minimum of six months of supervised field experiences.

Physical Therapist

Physical therapy is concerned with the restoration of function and the presentation of disabilities following disease or injury of the muscles, nerves, joints, bones or loss of bodily parts. In addition, emphasis is placed on preparing patients psychologically for treatment. Since the seriously disabled are often emotionally distraught and burdened by feelings of hopelessness, ways must be found to eliminate these barriers and gain the confidence of patients before effective long-range treatment can commence.

There are two levels of programs: A four-year program in a college or university leading to a baccalaureate degree and a post-baccalaureate program leading to a certificate or masters degree. The curriculum includes human anatomy, physiology, psychology, clinical medicine, tests and measurements, therapeutic exercise and assistive

devices, physical agents and clinical application of physical therapy theory and procedures.

Physical therapists apply therapeutic properties of exercise, heat, cold, water, electricity, ultrasound, and massage to improve circulation, strengthen muscles, encourage the return of motion, and generally, to gain or retrain the patient to perform the activities associated with daily living. They perform and interpret tests and measurements for muscle strength, motor development, functional capacity, and respiratory and circulatory efficiency to develop programs for treatment. They evaluate the effectiveness of the treatment and discuss the patient's progress with other health-related professionals.

Summary

Chapter I provided the background information for the study, reflected on societal forces having impact on health care and allied health education, and introduced the research questions to be addressed in the study. Chapter II will present a discussion of related literature and research, Chapter III will describe the methodology, Chapter IV will present the data analyses, and Chapter V will offer the summary and discuss implications of the findings.

CHAPTER II

RELATED LITERATURE AND RESEARCH

This chapter presents a discussion of the findings of related literature and research in the areas of curriculum, ethics and law, finance, and administration.

Curriculum

The bricks and mortar of an educational program being made up of the curriculum, the necessity for broad understanding and commitment to the learning/teaching processes, is obvious. The curriculum also is the framework within which the other components, e.g. ethical and legal aspects, finances, and management function.

Most allied health occupations exhibit an educational evolution not unlike that of the nursing profession. No disparity existed between theory and practice. Initially, qualified practitioners taught clinical skills and techniques to individuals with lesser academic preparation. The basic scientific knowledge imparted was usually limited to the information pertinent to the clinical task taught. Repetitive practice and skill development were emphasized. The new clinical practitioner became the expert and began teaching others.[69]

Programs were then formalized and institutionalized, and the institutional base shifted from the clinical site to the collegiate setting. The programs were reviewed by accrediting bodies; practitoners

were credentialed. Frequently, those who previously taught in a clinical facility were encouraged to make the transition to the academic community by undertaking additional training in specialty areas and methodologies, and by pursuing advanced degrees in order to satisfy the accrediting bodies. As programs became larger and more institutionalized, the need to shift specific components of the clinical portion back to the real world of the health care delivery facilities become obvious.[70]

Schweer noted that early in the evaluation of the apprenticeship system, the following deficiencies became apparent: (1) little attention was paid to educational goals because the primary purpose of such systems was to provide improved patient services; (2) insufficient time was provided for the development of skills prior to their application to patients; (3) insufficient opportunity was provided for gaining the necessary conceptual basis to apply theory to practice; (4) the learning of skills was limited to what could be transferred from one practitioner to another; (5) student's motivation in learning waned as the personalized approach to patient care was lost; (6) correlation between the patient and the physiology and pathology described in class were more difficult to perceive; (7) the classroom and clinic became dichotomous entities representing, respectively, the ideal and the real; (8) poor communication between the didactic instructors resulted in a loss of interest in educational support by clinical practitioners; and, (9) a discrepancy between didactic and clinical instruction as each became less aware of what was being taught. Through the years, according to

Schweer much attention has been given to these issues which has resulted in a voluminous amount of literature.[71]

The list of authors supporting the values of clinical experiences is long and impressive.[72,73,74] From the beginnings of formal education, clinical experience has been an integral and inherent part of the educational process. Unfortunately, too many of the early hospital schools, inherent was synonymous with dominant and the rhetoric of learning by doing degenerated into learning only by doing. As Infante so deftly put it, "caring for patients is believed to be synonymous with learning."[75] The idea that the student is not a practitioner but is learning to become a practitioner is often forgotten. Frequently clinical experience is centered on patient care instead of on student learning. Student involvement in direct care and services of patients appears to be the plight of the educator. In all cases, the academic and clinical centers should be organized and administered as to insure satisfactory educational experiences for the student. The essential premise is that students are enrolled for educational purposes and the use of their time must be planned accordingly.[76]

If the clinical experiences are to be a meaningful and effective part of the students' education, and not an ill-defined experience tacked onto the students' academic work, a sound model for curriculum design is necessary.[77] A sound curriculum design defines the scope and sequence of learning experiences; it designates the breadth, variety, type, placement, and function of such experiences within a unified whole curriculum. Historically, the allied health programs frequently receiv-

ed little attention in the definitive and sequential curriculum design stages and often depended on matters of convenience.[78]

Philosophy

The philosophies of the affiliating institutions must be examined closely to assure congruence. The philosophy of allied health education component should always include the concept of interdependence of the clinical and academic institution.[79] The relationships are well expressed in the Handbook for Physical Therapy Teachers:

> Any statement of philosophy developed within a particular educational setting must be mutually acceptable to all members of the faculty, both academic and clinical. There must also be compatibility between the philosophy of the institutions where ... students will receive clinical experience. Certain unifying principles must be mutually agreeable so that concerted action may be taken to meet the needs of the profession . . . When there is agreement on fundamental principles the students will have an opportunity to acquire a clear-cut sense of purpose. Mutual interests, mutual trust, and mutual effort will be evident if the statement of philosophy of the School[80] . . reflects the basic tenets of the encompassing institutions.

The philosophy and operational goals of the program must be determined by the cooperating institutions. Such goals must be rationally derived and compatible with the relevant needs and characteristics of the students, the availability of resources, and demands of applicable interest groups and society as a whole. It would appear to be, at best, difficult to educate students in a manner that encourages formulation of a philosophy of professional practice when the discrepancies exist between the philosophy of the clinical center in which students experiences occurs and that of the academic facility.[81]

Objectives

The objectives of the clinical education phase should clearly reflect the philosophy of the program. Not only must each objective support the overall philosophy, but all of the objectives together must satisfy the goals and needs of the total educational program. There is concurrence in the literature that the major goal of clinical experience is to foster an environment that enables students to become competent providers of quality health care and to make the transition from student to practitioner. Historically, this gap between academia and the real world of practice has been wide.[82,83]

Another major issue raised by clinical staff is their concern to keep up with the "educational movements and jargon." There is concurrence in the current literature that indicates that clinical instructors need greater expertise and training in educational endeavors, many clinical instructors have not been too receptive of such recommendations.[84] Too often the already overworked and undercompensated clinical instructors have been turned off by well-meaning but ill-advised educators with their special jargon and their educational demands. They feel that sufficient energy is being exerted by them to maintain their professional competence.[85]

Content

Massive quantities of content constantly bombard the allied health professions. It is the special function of the curriculum planners to select and arrange content so that the desired curriculum aims, goals and objectives are most effectively and efficiently achieved. However,

the task is far more complex and difficult than it immediately appears.[86] Many of the more difficult aspects of curriculum content planning are completed by the various national accreditation organizations which provide criteria which must be met before full program accreditation will be awarded.[87,88,89] These criteria are listed in the Essentials and provide a framework for the curriculum decision-making process.[90]

The uniqueness of the clinical experience component cannot be overemphasized.[91] The proper integration of clinical observation, learning, reinforcement, and practice within the program provides the students with the unparalled opportunity to translate basic theoretical knowledge into the diversity of intellectual, psychomotor and affective skills.[92]

Learning Activities

Meaningful learning activities represent the heart of the curriculum because they are so influential in shaping the students' experience. "Learning experiences, and not the content as such, are the means for achieving all objectives."[93] Good intentions, fine goals and objectives, excellent content, flawless evaluation procedures are all worthless if the learning activities in which students engage do not provide them with meaningful and relevant experiences whose consequences are educationally sound.[94]

Taba suggests that learning experiences or skills should be required, be needed, be learnable, promote active learning, serve multiple objectives, and promote learning of main idea.[95] Tyler

identifies three basic criteria for the organization of learning activities: continuity, sequence, and integration.[96] In the absence of substantive research to the contrary, these criteria have come to be widely accepted as "rule-of-thumb" standards for deciding on the organization of curriculum activities.[97]

Integration of the clinical and didactic components of an educational program is an essential but frequently problematic element in the design and implementation of clinical education.[98] Therefore, it is important that both the academic and clinical settings work closely together to ensure and promote the thorough and efficient integration of learning experiences and to motivate students by providing them with opportunities to analyze and react to various aspects of their total experience. Collaborative integration facilitates the transfer of conceptual knowledge and comprehension to the professional reality of application, synthesis, and problem solving. Without such integrative framework, learning results in discrete and unrelated episodes of little immediate value to the student or future worth to the clinical practitioner.[99] Those students who are conscious of the relationships between essential concepts and their application can readily adapt to future change within their profession.[100]

In addition to the cognitive and psychomotor domain integration, the affective domain concerns come to the forefront. The interpersonal skills of the clinical instructors can virtually make or break the experience.[101] If a clinical instructor is brusque and uncaring, all the planning that has preceded will not make this a pleasant experience. The student may learn but the aftertaste of the experience may be bitter

enough to undermine the goals of the affiliation. The reverse is also true; the exuberance and caring of clinical instructors have serendipitously made many clinical affiliations superior learning experiences when little planning has preceded them.[102]

In the selection of the learning experiences, the resources of the clinical faculty must be examined carefully to insure congruence with the goals and objectives of the educational program. Murdock suggested that the philosophy and goals of agencies, staffing patterns, geographic location, clientele, census statistics, support services, and physical facilities should all be considered in relation to potential for learning experiences for students.[103] Schweer listed five major areas for consideration: administrative aspects, human resources, kinds of patients available, procedures, and the physical facility.[104]

The quality of clinical education phases is influenced by many variables, ranging from the personal characteristics of those who do the teaching to the specific decisions instructors make while teaching. Also important to the overall effectiveness of instruction are the settings and strategies that are selected for use.[105]

Evaluation

According to Schon, "evaluation is a process through which organizations perceive the consequences of action, assess their meaning for future action, and reformulate plans and policies."[106] Mackenzie listed four reasons for measuring clinical performance: (1) to certify competence, (2) to maintain quality in health care delivery, (3) to provide feedback to the student, (4) to improve the instructional process.[107]

Evaluation is probably one of the most narrowly viewed aspect of the education enterprise since the topic almost exclusively addresses student achievement. Although the evaluation of student clinical performance is undoubtedly one of the most important aspects of evaluation, it by no means approaches what may generally be conceived of as a comprehensive curricular evaluation. Clarity about the function of evaluation in curriculum is essential if the evaluation is to contribute what it should to the implemented curriculum.[108]

Evaluation serves numerous purposes in allied health clinical education. It may be carried out for certification and accreditation purposes, defending which curricular activities have been planned or what has been done; as a form of information gathering, providing a basis for modifying objectives, activities, or standards of behavior; or as a form of monitoring, assessing the administrative structure and managerial effectiveness of the educational institution, the clinical centers, and the interorganizational relationship.[109]

In education today, there is growing trend toward holding educational institutions accountable for what is learned rather than for what is taught.[110] "Accountability," a term with legal connotations, may be partially defined by contrasting it with "evaluation." Evaluation is concerned with effectiveness; accountability is concerned with both efficiency and effectiveness. Evaluation is likely to be internal and to emphasize input and process; accountability is usually external, emphasizing output. Input, output, and process--combining both evaluation and accountability--are intimately related as an evaluation process in some evaluation schemes.[111] Accountability shifts the learning

responsibility away from the student and onto the educational institution and the faculty, which are accountable for student accomplishment.[112] Demands for accountability may come from society; the public may invade a profession and seek to control the quality, quantity, and cost of the service it provides. Demands may come from governmental agencies, legislatures, the courts, law enforcement agencies, and statewide governing boards and coordinating agencies. On the other hand, accountability may be internal. There is currently a trend in educational institutions toward codification of the internal decision-making process (including codifying faculty rights and responsibilities) and toward increasing concern with management, with attempts to relate managerial efficiency to educational effectiveness.[113]

Evaluation of student performance in the clinical setting remains one of the most stubborn and recurring problems for allied health educators.[114] And, perhaps the most controversial evaluation mechanisms are grades.[115] Grades are symbols given by instructors to indicate a student's degree of accomplishment and are dependent upon whatever measurement processes have been carried out by the instructors, and therefore, suffer from all the errors of measurement that are involved in those measurement processes. In addition, they suffer from all the problems of subjective judgments, including conscious and unconscious biases of instructors, lack of clear criteria, and levels of reliability and validity. Grades have a simplicity that charms many people; they also have problems that cause discomfort in many measurement experts.[116]

Grades are, at best, a contaminated measure of achievement. They are frequently contaminated by personality traits, by errors of

leniency, errors of central tendency, just to mention a few. In addition, there are also philosophical disagreements with their use. The substance of the argument is that grades pervert the educational process by narrowing the focus of students and instructors, create harmful anxieties, and present artificial extrinsic motives for learning at the expense of the more "moral" motives that are intrinsic to the learning task.[117]

Stufflebeam has noted that, "the purpose of evaluation is not to prove--but to improve."[118] Approaching evaluation with this philosophy creates an evaluation system that is more than a mechanism of assigning grades--and everyone benefits.

Ethics and Law

Ethics and legal aspects of practice in both the health professions and education are becoming increasingly influential; thus the need for establishing a base-line understanding upon which to build. This study seeks to identify the level of this base-line understanding among those who educate and supervise allied health students.

Law and ethics in a given society are similar in that they have developed in the same historical, social, cultural, and philosophical soil, but they also differ in some important ways. Smith and Davis indicated that it is possible to view the relationship between ethics and law as a four-way grid. Actions can be (1) ethical and legal, (2) unethical and illegal, (3) ethical and illegal, and (4) unethical and legal. The latter two possibilities confront health professionals and present the most difficult situations to work through to some

satisfactory solution.[119] Ethical practice makes legal entanglements unlikely, and usually results in excellent services. Ethical decision-making is a frame of reference for the solutions of problems.[120]

Legislation and such documents as the Constitution with its Bill of Rights serve to connect the ethical concepts of a society with its legal system when ethical dilemmas must be solved in the courts.[121]

The ethical dilemmas confronting health professionals have such broad relevance and complex ramification that they tend to be perennially present. Health professionals have always had to make ethical decisions regarding patient care; however, this era differs from the past in several important ways. Not only do we have more data-based knowledge but we also have developed technology which gives us the mechanisms to implement this knowledge but with the potential for depersonalized care. The combination of knowledge and technology has led to increased power over human lives and minds. These rapid developments have made ethical issues in the health sciences more difficult to cope with, more relevant, and more urgent. Our ability to make morally-based decisions has not kept pace with our ability to apply technology.[122] While the consumer's expectation of compassionate, qualified care has increased, the health care system's capacity to render such care has decreased.[123]

There is evidence, however, that consumers are no longer willing to put up with this state of affairs. The frequent denial of their fundamental rights, among them, courtesy, privacy, and most of all,

information, has brought about the ultimate form of patient rebellion--the malpractice suit.[124]

The advent of patient and student rights raises some knotty questions and challenges the health care providers to be more accountable than ever before. Corcoran points out that society must be ready to account for the rights of all involved, to be able to clearly delineate objectives and defend the need for a service setting to attain the objectives, solicit informed consent where appropriate, present a conceptual guide for the educational process, and support goals of all involved. Gone are the days of assuming that every patient would be desirous of the attention of students and that the need for "hands-on" experiences was ample justification for the presence of students in the clinical setting.[125]

The ethical and legal aspects of health care, or the absence of them, is demonstrated in the discontent of practitioners, the dissatisfaction of consumers, and the growing involvement of legal entanglements in health care. Most people underestimate the impact of ethics and law on the health professional. Yet, a quick scan of even the popular literature, press reports, and government activities soon reveals the pervasive interest of society in matters such as health care ethics. Litigation and regulation in health care are the signs of great conflict and public scrutiny of the health care delivery system.[126]

The legal complexities, although somewhat frightening to the unknowing, have caused a tremendous surge of accountability, and evaluation in the practice of the health disciplines. Historically, most malpractice litigation delineating the liabilities of health

professionals has been directed against the physician. Although there are increasing numbers of claims against other health care personnel, most claims have been decided along doctrines evolved from litigation of patient-physician disputes.[127] It is no secret that the medical and allied health professionals are under a continual siege of litigation which challenges their professional standing.[128] In its 1977, Report on Malpractice Claims, the National Association of Insurance Commissioners summarized claims in more than 24,000 cases.[129] It reflected that physicians were viewed as contributing to patient injuries in 40 percent of the cases. Surprisingly enough, house staff and support personnel were regarded as more contributory (10 percent) than registered nurses (9 percent).[130]

As the allied health professionals become more visible, the general public will simultaneously increase its expectations of the degree of expertise and standard of rendered care. Members of the general public do not easily distinguish between the responsibilities, roles, duties, income, and professional standards of those associated with the medical profession.[131] It is within this area of ambiguity, buttressed by the professional standard of health care delivery, and compounded by the increasingly litigious nature of the American society, that professional liability and malpractice issues need to be addressed and fully understood.[132]

The regulatory environment in the past was such that little consideration was given to the requirements of the state regulators of health care, for there were none in most jurisdictions, or, the

educational authorities, for advanced educational programs were largely outside their jurisdiction. Instead, various educational accrediting organizations, and ultimately health care facilities' licensing and accrediting agencies have imposed the regulations that now exist.[133]

The litigation crisis has become an ever present, and at times, painful reality to all in the health care facility. Malpractice headlines are common, statistics are generated and analyzed ad infinitum, and lawyers and mediocolegal experts expound learnedly on the cause of the crisis. It is inevitable that the trend toward increased professional liability will continue as will the unprecedented legal suits against the autonomy and integrity of educational and clinical institutions.[134]

Today most health care institutions are responsible for the quality of care they render. In some states the courts have imposed the rule, in others, the legislature has taken the lead. Regardless of who imposed it, the rule provides that:

> The governing body of the hospital is responsible for the quality of care rendered within it and must adopt rules and regulations designed to facilitate the rendering of care in accordance with the applicable standards of practice, whether that care is rendered by its employees or by independent staff physicians, students, trainees, or other persons permitted to use the facility.[136]

In the famous landmark decision of the Darling v. Charleston Community Hospital, the hospital as an entity, was found liable under the doctrine of corporate negligence.[137] The hospital has the obligation of giving due care to every patient utilizing its facilities. In this situation, the hospital had failed to meet the established standard of care. The governing body of the health care facility is the board of

trustees. Case law, statutes, and standards of accreditation all recognize that the ultimate, non-delegable corporate and legal responsibility of the board is to assure that quality care is provided. Vesting of the legal responsibility for patient care is more clearly recognized and understood today than ever before. Each judicial decision reaffirms the fact that the governing boards of hospitals and health care centers have the ultimate responsibility for the operation and function of the agency for providing proper patient care.[138]

No contract relieves the clinical facility of the basic responsibility to see that no harm comes to the patients.[139] Whether the school also is responsible for the quality of patient care, however, depends on the degree to which representatives of the school participate in rendering or supervising the rendering of care. The greater the extent of participation by the school's faculty in the clinical program, the greater the degree of the school's exposure to liability for the negligent rendering of patient care. To the extent that the clinical supervision of students is provided by clinical facility employees, the degree of the school's exposure is lessened. Liability might well be imposed, however, when school employees participate jointly with negligent clinical facility employees and the school employees fail to take action to prevent patient injury. Regardless of the degree of the school's exposure, however, the clinical facility is first and foremost responsible and cannot delegate to any other organization its basic responsibility.[140]

As part of their educational program, student professionals are entrusted with the responsibility of providing certain kinds of care to patients. When liability is being assessed, a student serving at the clinical facility is considered an employee of the facility. This is true even if the student is on affiliation and is not a student of the same facility. The student will be personnaly liable for negligence if any injury results, and under the doctrine of respondent superior, the clinical facility will be personally liable for any harm suffered.[141]

An instructor or supervisor of the student is not automatically responsible for every negligent act of a student merely because of the instructor-student relationship, unless the student is also an employee of the instructor. Generally speaking, an instructor or supervisor of the student is entitled to assume that a person who has successfully completed a particular course of training is competent to perform the tasks covered by the training program unless the instructor either knows, or should know, of some individual lack of competence on the part of the student. Of course, to the extent that the instructor also participates in rendering care to patients, the instructor must adhere to applicable standards or be responsible to the patient in damages for any injury caused by deviation from the standards.[142]

For educational institutions, the primary regulating forces are the accrediting organizations. Thus far, there has been no ground swell of judicial or legislative action to impose institutional responsibility for the quality of an educational program. However, some educational commentators are beginning to fear such responsibility. The best protection for the school seems to be, "to provide clear warnings to

students that completion of a course is no gaurantee of successful licensure or certification and to emphasize the individual student's personal responsibility."[143]

Clear understanding, good faith, and mutual benefit are essential to a good working relationship between the clinical facility and the academic setting. However, a carefully drafted affiliation agreement is encouraged, and a full understanding of each of the elements in the agreement is essential for both parties. Moreover, because circumstances differ greatly among clinical facilities and the academic institutions, affiliation agreements should be based on the individual needs and drawn up after the assessment of the resources and capabilities of both institutions. Only through direct participation in the tailoring of the document to meet the objectives of each institution, will both parties gain an understanding of their roles in the affiliation relationship.[144]

In 1976, the American Hospital Association revised its 1967 STATEMENT ON ROLE AND RESPONSIBILITIES OF THE HOSPITAL FOR A COLLABORATIVE EDUCATIONAL PROGRAM IN THE HEALTH FIELD to "emphasize the shared responsibility of hospitals and educational institutions regarding curriculums, clinical facilities, and costs."[145] It states that the primary mission of the hospital is to provide quality patient care which in turn, depends largely on competent health professionals practicing in the hospital. Therefore, it is in the best interest of a hospital to participate in allied health education programs. The guidelines point out that the hospital has a responsibility to understand the philosophy, objectives, and goals of the educational program as well as the re-

sources and capabilities of the educational institution to conduct the program.

The legal implications of the affiliation agreement are of concern to the allied health program administrators.[146] Numerous problems can arise in student/faculty/patient interactions. Problems that may lead to legal confrontations can arise from two general areas: (1) problems between the two institutions, and (2) problems involving student and/or faculty interactions with patients. The former should result in very few problems having to be resolved in the courtroom. The process of developing an agreement should provide a forum for the discussion of most problem areas, and the contract should include mechanisms for resolving conflicts once the program is in operation. If the problem does have to be resolved in a courtroom, the affiliation agreement is a potent tool for the resolution of the problem. Administrators should fully understand the language and implications of the affiliation contract. In most states, an entire institution is considered to be an individual entity, with the rights and privileges similar to those of an individual in that state. Therefore an administrator signs a contract not only for that department or program, but also for the whole institution. For that reason, the body that holds the ultimate responsibility for the institution must first grant an individual the authority to sign.[147]

In summary, it is apparent that health care education administrators must become aware of the liability risks by identifying factors which determine liability; identify trends emerging as legal doctrines

from courts rendering malpractice decisions; and take action to prevent, minimize, or counteract the likelihood of such events occurring within their own operational sites.[148]

Finance

Implementation of educational programs necessarily involves funding from a reliable and constant source. In allied health clinical education, recent developments in, for example, cost containment, have the potential for eroding the reliability and constancy of funding support. Perceptions of the impact and possible alternatives for maintaining support are crucial to allied health educators and their counterparts in the clinical setting.

Most of today's health care facilities are not managed as profit-making institutions and generally do not have philanthropists who will pick up the deficits. These facilities depend greatly on third party payers as their major source of revenue.[149] On the average, the facilities' revenues and collections are received as approximately 30 percent from Blue Cross payments, 30 percent from the government agencies, 30 percent from commercial and independent insurances, and only 10 percent from self-pay.[150] Even though the share of the total health care facility expenses paid by a third party varies with the geographic area and with the facility, more than 90 percent of the $76 billion spent on hospital services were reimbursed by third party payers. Now, third party payers, who may be Blue Cross, the commercial insurance companies, Medicare, Medicaid, Workmen's Compensation, or any other agents who contract to pay for all or part of a patient's bill, have been reevaluating the medical charges and services for which they will reimburse.[151]

Traditionally, hospitals and other health care facilities have participated in the clinical training of allied health personnel with little concern or knowledge of the impact of such program on the facility's costs. Although most health care facilities would support the advantages implicit with an academic affiliation, nonetheless, a health care facility is expected to defend the appropriateness of any increased expenditures that an affiliation may bring.[152]

Some critics, particularly the third-party payers who obviously pay for most of the health care facility costs, have questioned the impact of clinical affiliations on the costs of patient care. Their position is that their responsibility is to pay for "reasonable" costs of patient care, and not for any costs related to education.[153] Responses to these criticisms include studies which have focused on medical educational costs rather than allied health profession costs.[154,155]

There is a variety of arrangements noted in literature regarding reimbursements for using clinical facilities. Some institutions pay, others do not.[156] At some universities, funds are transferred to the personnel budget of the clinical area with no individuals designated as the recipients. This mechanism provides additional workers to compensate the clinical facility for employee time spent in teaching, supervising, and evaluating students.[157] In other instances partial or full salaries of designated individuals are paid by the academic program.[158]

In still other arrangements, the clinical facility receives students' tuition or a negotiated amount for each student assigned to the facility.[159] This issue has been addressed by the American Hospital

Association. Although the education of health manpower is integral to the treatment and care of patients, the costs of the program must be identified and allocated to the appropriate parties.[160]

In reviewing literature, it was interesting to note that some facilities are requesting compensation for providing clinical experiences to students from academia.[161,162] For example, Martel writes:

> If hospitals are going to continue to provide clinical learning experiences (and from all indications, I think we are beyond "going"), then at some point we must give serious consideration to charging fees for such experiences. Hospitals are under the gun for cost effectiveness, and if the educational process is properly done, it will involve planning time, evaluation time, and clinical instruction time on the part of full-time employees in the clinical setting. And time is money: we all know that. To make joint ventures sound business arrangements (thus allowing educators to set expectations and expect to have those expectations met), it is in our mutual interests to set fees.[163]

In reviewing the clinical education literature on fiscal issues, it is interesting to note that the use of clinical resources for the purpose of providing clinical education to students from academic settings is discussed at length. Many groups and organizations have considered this very complex and sensitive issue, but few have offered any workable solutions.[164,165,166]

Few would deny the fact that clinical education is an expense for the clinical facilities and that there is some legitimacy in justifying these costs to patient care.[167] The administrators of both academic and clinical facilities need to address this issue and evaluate the financial feasibility of continuing with the present arrangements, modifying present arrangements, or terminating program affiliation.[168]

Administration

Effective and efficient management of resources of all varieties is dependent upon mutual understanding of and respect for the reciprocal roles involved in cooperation between academic and clinical facilities. These roles have different appearances in these contrasting settings.

The administrators of both academic and health care facilities face a complex set of managerial tasks: directing the activities of increasingly large personnel bodies; negotiating and mediating the conflicting needs and demands of various groups and organization; blending the goals and styles of both academic and the clinical facility; and retaining a creative, optimistic perspective in the face of severe fiscal constraints and increased measures of accountability.[169]

The way in which one interprets the administrative function is largely dependent on one's accepted theory of organization. The nature and function of leadership have been delineated and studied from many different perspectives. Understanding some of the theories may help the administrator not only to exhibit leadership but may also encourage it in others.

The literature on organizational theory as applied to higher education reflects dual interests. Much of it focuses on the structural aspects, such as diffuse goals, professional technology and fragmentation into interest groups, or decision models, such as political, bureaucratic, and collegial. As Baldridge and associates pointed out, colleges and universities differ in many respects from corporations such as the health care facilities because academia's goals are diffuse and

ambigious in contrast to the rather clear objectives of a corporation.[170] The personnel consist of professionals who often identify more closely with the disciplines they represent than with the institution. These professionals act autonomously in many respects; they do not fit classical descriptions of workers or humanistic description of social participants. At the same time, the clinical facilities employ a corps of professionals, non-professionals, quasi-professional middle managers who are responsible for numerous services. These individuals and their staffs often conform to a bureaucratic model of organization as they coexist with the professionals in the academic community.[171]

In the review of literature on theory and research in the administration of higher education, it appears that there is no clear evidence that "administrative" theories are general or universal because colleges and universities are unique institutions and reflect a variety of administrative patterns.[172,173,174]

The allied health administrators both in collegiate and in health care settings clearly serve important leadership and administrative functions. While some authors address the general roles these individuals play, these administrators have rarely been the subject of research.[175,176] Allied health administrators must respond to professional, institutional, and inter-institutional demands. Emerging professional status, rapid expansion and image are of special concern for these administrators.[177] In the academic setting, the institutional roles these persons play may be even more complex than in any other sector of higher educational administration.[178,179]

Academic and clinical facility interactions relating to clinical education affiliations require even greater skills and creativity on the part of administrators. Yet, little appears in professional publications.[180] In a study conducted by Snow and Mitchell, they concluded that "close relationships" between affiliating institutions facilitated better educational programming, better sharing, better communication between academia and clinical sites, and better facility involvement in the clinical setting.[181] The major problems associated with administrative ties appear to center on mutually acceptable goals and objectives of joint venture; appropriate involvement in the early planning stages; staffing issues particularly addressing workloads of the teaching clinical staff; role confusion particularly related to areas addressing responsibilities and authority; appropriate remuneration and recognition of teaching staff; the necessity of a statiscally outlined and implemented coordination process; overall morale of the clinical facility; and the general lack of effective monitoring and communication between the educational and clinical facilities.[182,183]

Leadership is an essential function. It relies heavily on communication and motivation. Only through effective use of leadership can an administrator obtain active and knowledgeable participation and cooperation in the achievement of organizational goals.[184] Leadership requires that others are willing to follow, and people follow those who they think will enable them to achieve their own personal goals. An administrator's responsibility is to create an environment that others find satisfying and challenging.[185] Frequently, problems between affiliates arise as a result of poor communication.[186]

"Communication is a means, not an end. It serves as the lubricant fostering the smooth operation of the management process(s)."[187] The management process depends on effective communication. Without it, plans and objectives would exist only as a conglomeration of isolated people and departments; the execution of activity could not take place because no one would know what, when, how, and why to do anything; and the monitoring process would not exist because there would be no feedback mechanism for measuring performance with expectations.[188]

Much of the study and appreciation of communication is related to the recognition that communication makes life possible, that organizations cannot exist without effective communications, and that when communication among individuals or organizations fails, their capacity for effective cooperation and productive effort also fails.[189]

Most administrative activities are directly or indirectly related to achieving organizational goals. Planning, organizing, staffing, and leading gives substance to this movement. Evaluation provides evidence that these actions have been effective. Evaluation is an integral component of the administrative process. Yet, the variety and complexity of evaluation designs, procedures, and philosophies has proved confusing for educators and health practitioners.[190] In addition, many evaluation models are costly, time-consuming, inflexible, and incomprehensive, and therefore do not provide the necessary information to administrators.[191,192]

Whenever there are plans, goals, and objectives to be achieved, and whenever there are assignments of duties and delegation of authority

and elements of accountability, it is necessary to have controls, feedback, and evaluation.[193] Evaluation is an essential check on the other administrative functions. Failure in one part of the system affects all the other areas because they are intricately linked and interdependent.[194]

Unfortunately, evaluation is all too often viewed as an unpleasant process with a punitive purpose.[195] Instead evaluation should be forward looking, making possible corrective action by changing plans, adjusting program activity, increasing support, reducing the scale of activity, reorganizing, altering procedures, changing personnel assignments, and improving leadership.[196]

Summary

The curricular, ethical and legal, financial, and administrative issues related to allied health clinical education on which this investigation was built were presented. In the next chapter, the steps involved in the design and analysis of the study will be presented.

Chapter III

METHODOLOGY

The major purpose of this study was to identify perceptual differences between administrators of academic programs and clinical facilities providing clinical education for students from academia. The investigation identified items at issue regarding curricular, ethical and legal, financial, and administrative concerns and practices in clinical education for Medical Technology, Occupational Therapy and Physical Therapy programs. In this chapter, highlights of the study and the instrument along with the description of the survey and analysis processes will be presented.

Sampling Technique

All allied health programs in the United States were potential participants for this study. However, only the university-based Medical Technology, Occupational Therapy and Physical Therapy programs utilizing specified but limited affiliated clinical education experiences/fieldwork were chosen. The underlying assumption was that since these allied health programs incorporated similar affiliated clinical education components, similar concerns would be raised. For obvious logistic and economic reasons, all clinical affiliates were not included in this study. Therefore, for each academic program, two clinical facilities which provided educational experiences to students from academia were

selected. Of the 661 mailed surveys, 221 were sent to academic facility administrators and 440 sent to clinical facility administrators.

The technique used to select the administrators in this study was the following:

1. All the university-based Medical Technology programs along with two of their listed clinical affiliates were chosen from the 10th edition of Allied Health Education Directory. Mailing addresses were obtained from the Directory and the American Hospital Association Guide.

2. For Occupational Therapy, all the academic programs listed in the Directory were incorporated in this study, however, since the clinical affiliates were not listed for the academic programs, the 1978 Occupational Therapy Fieldwork Center Directory was used to identify centers providing clinical education. It was not possible to match clinical affiliates with each academic program. Mailing addresses were obtained from both the Directory for academic programs and the OT Fieldwork Directory for the clinical facilities.

3. For the Physical Therapy programs, all the academic programs listed in the Directory along with the programs listed in Project on Selection of Clinical Education Sites were incorporated in this study. Unlike Occupational Therapy, it was possible to correlate two of the clinical affiliates for each academic program from the Project publication.

For the study, data were obtained available from 72 percent of the surveyed educators and 62 percent of the surveyed practitioners with overall return rate of 65 percent. The return rates for each of the allied health programs were as follows (Appendix A):

1. For Medical Technology, 61 of the 71 mailed surveys were returned by the educators with 57 (80 percent) usable, and 86 of the 142 mailed surveys were returned by the practitioners with 79 (56 percent) usable.

2. For Occupational Therapy, 41 of the 54 mailed surveys were returned by the educators with 39 (72 percent) usable and 80 of the 108 mailed surveys were returned by the practitioners with 74 (69 percent) usable.

3. For Physical Therapy, 68 of the 96 mailed surveys were returned by the educators with 64 (67 percent) usable and 128 of the 190 mailed surveys were returned by the practitioners with 118 (62 percent) usable.

Most of the usable returned surveys were completed by assistant or associate deans and program directors on behalf of the academic programs, and by the program directors, educational/clinical educators, and department heads/supervisors on behalf of the clinical facilities providing clinical education experiences to students from academia (Appendix B). In addition, the majority of the responding clinical facility administrators were primarily from governmental or proprietary hospitals, and the responding academic administrators were primarily from publically supported institutions (Appendix C).

Instrument

The literature search revealed numerous concerns expressed by academic and clinical administrators, which were classified into the following categories: (1) curriculum, (2) ethical and legal, (3) financial and (4) administrative. Based on this grouping, a research

question for each of the four major categories was developed. The questionnaire was contracted to answer these research questions.

The mailed survey questionnaire format was chosen as the most efficient means of gathering data since this study was conducted on a national scale soliciting input from over 600 program administrators. An accompanying cover letter described the intent of the study and solicited the participation of the administrators. A separate profile sheet for the academic and clinical facility administrators was developed. The questionnaire consisted of five different sections grouped by response format and not content (Appendix D). The survey questionnaire sections included the following:

PART A: 30 forced-choice questions with the following choice options:

Y = Yes/Most of the Time
S = Sometimes
N = No/Never

PART B: 37 questions with instructions to "check as many as applicable."

PART C: 44 forced-choice questions with the following instructions:

A = Academic Institution only
B = Academic Institution with input from Clinical Institution
C = Clinical Institution only
D = Clinical Institution with input from Academic Institution
E = Collaboratively (Academic and Clinical)
F = Not Considered or Does Not Apply

Questions #1 through 22 reflected "current" practices.
Questions #23 through 44 reflected "ideal" practices.

PART D: 59 questions using a "Likert-scale" response format.

PART E: 8 forced-choice questions addressing financial reimbursement mechanisms. Respondents were asked to indicate the mechanisms "only if" the academic facility reimbursed the clinical facility for providing clinical experiences to students from academia.

All questionnaires were coded with an identification number located on the upper right hand corner. The numbering system used was the following:

	Academic Series	Clinical Series
Medical Techology:	1000	2000
Occupational Therapy:	4000	5000
Physical Therapy:	7000	8000

The purposes of coding the questionnaire were for generating a "follow-up" and "summary report" mailing list.

Data Analysis

Descriptive statistical analyses were completed on the survey responses. Percent frequency distributions were calculated and presented in table format. The "n" values incorporated in the tables represented the raw number distribution of respondents.

Unless otherwise noted, all other figures in this study were presented as percentages. Due to the rounding of numbers, there were minor discrepancies for the 100 percent totals. However, virtually all such discrepancies were limited to two tenths of a percentage point. Also, in some instances the totals for the "check as many as applicable" and "ranking" table columns did not total 100 percent due to the respondents using the same ranking number more than once. The omission of responses on a questionnaire were tabulated as no response. The criterion used for identifying "meaningful" differences in the perceptions of

academic and clinical program administrators was arbitrarily set at a minimum difference of twenty percent in the percent frequency between their responses to the survey questions. In instances where "meaningful" differences were noted, the concern and practice was considered an "item at issue."

Pilot Study

A pilot study was conducted using allied health professionals and some of their clinical affiliates. Comments from a total of twenty-five academic and clinical facility administrators representing Medical Technology, Occupational Therapy and Physical Therapy programs were solicited. The comments and suggestions on wording of questions were elicited and incorporated into the cover letter, profile information sheets and the instrument. Pilot study participants were not included in this study.

Administering the Survey

The mailed survey packet contained the following items: (1) cover letter describing the study and requesting their participation in the study; (2) the instrument and the cover profile sheet; and, (3) a postage-paid, self-addressed return envelope. Three weeks following the deadline, the non-respondents were mailed a follow-up packet.

Only a minority of mailed surveys achieve more than a forty percent return rate. The generally accepted view in the survey literature was that a return rate of 45 to 50 percent was a genuine achievement. In order to provide reasonable assurance that the assembled data could be regarded as representative of the population from which the

sample was drawn, an arbitrary response rate was set at 50 percent. This study had an overall response rate of 65 percent.

Limitations

The following were among the major constraints faced in planning and conducting of this investigation:

1. The review of literature revealed a general concern for issues related to the research questions and consequently justified the existence of a problem. However, from the literature review it was apparent that the perceptions of clinical education as identified by administrators of both academic programs and clinical facilities affiliated with academic institutions have not been a focal point of study. The lack of empirical data required the researcher to develop an original research tool which may account for some of the results.

2. Since an instrument was not located through the literature search, the researcher was faced with the difficulty of developing a comprehensive original instrument. As a result, a lengthy questionnaire was developed which potentially introduced participant error and bias, and reseacher bias which may have even discouraged some respondent participation.

3. A centralized listing for all Occupational Therapy and Physical Therapy academic programs and their clinical affiliates, from which the sample could be drawn, was not readily accessible. Compounding this situation was the problem that the Directory and the Project listings contained only the names of the facilities and their general location. The American Hospital Association Guide provided the mailing addresses

for hospitals only. For non-hospital facilities, only the name, city and state of the facility were provided. As a result, there was the great possibility that some surveys never reached the administrators.

4. The findings of the study may have been affected by the inherent limitations of the survey methodology. For example, one of the main disadvantages of data gathered by mail was the possibility of a low response rate which could have resulted in a nonrepresentative sample. Those who returned the questionnaire possibly had an interest in the subject being studied while those not responding were indifferent. Also, there was no way of determining the magnitude of error in sample surveys conducted by mail when little was known about the population from which the sample was drawn. Another disadvantage of the mailed questionnaire was the investigator's difficulty in judging the respondent's interpretation of the survey questions, and the honesty and sincerity of their responses. In addition, there was no assurance that the questionnaire was completed by the appropriate person.

Summary

This chapter of study presented the instrument design and technique used in the data analysis. Chapter IV will present the data and discuss the survey findings.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

For ease in reading and interpretation, the content of this chapter has been arranged by introducing the research question, stating the survey question to which the academic and clinical facility administrators responded, presenting the related findings in a table format, and summarizing the findings.

RESEARCH QUESTION #1: CURRICULUM

Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the curricular issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

Survey Question: Who is/should be responsible for assessing the quality and effectiveness of the clinical education rotation?

TABLE 1

RESPONSIBILITIES FOR ASSESSING THE QUALITY AND EFFECTIVENESS OF CLINICAL EDUCATION

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	56.1	25.3	35.8	20.3	62.5	30.5	52.1	26.3
	Ideal	42.1	17.3	35.8	23.5	36.0	22.8	37.5	18.9
*Clinical	Current	7.1	35.5	10.2	35.1	3.1	21.2	7.2	29.3
	Ideal	8.8	38.0	10.2	28.4	9.4	11.9	9.1	24.2
Acad + Clin	Current	36.8	36.7	48.7	40.5	31.3	45.8	37.6	41.9
	Ideal	43.9	38.0	43.6	48.1	50.0	62.7	46.7	54.3
No Choice	Current	0.0	2.6	5.3	4.1	3.1	2.5	3.1	2.5
	Ideal	5.3	6.5	10.3	0.0	4.7	2.5	6.7	2.6
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

It is apparent from Table 1 that the administrators of both MT (56.1%) and PT (62.5%) academic facilities were responsible for assess-

ing the quality and effectiveness of the clinical rotation. However, there were perceptual differences between MT academia (56.1%) and clinical (25.3%), and PT academia (62.5%) and clinical (30.5%) regarding the educators assuming this responsibility.

There were differences between MT academia (7.1%) and clinical (35.5%), and OT academia (10.2%) and clinical (35.1%) regarding the practitioners primarily assuming this responsibility, and between MT academia (8.8%) and clinical (38.0%) regarding the practitioners assuming this responsibility.

Survey Question: Who develops/should develop the goals and objectives of the clinical education rotation?

TABLE 2

RESPONSIBILITY FOR DEVELOPING CLINICAL GOALS AND OBJECTIVES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	36.9	24.0	10.2	6.8	18.7	14.4	22.5	15.2
	Ideal	42.1	19.0	20.5	10.9	43.8	23.7	37.6	19.1
*Clinical	Current	22.8	55.7	66.7	89.2	54.7	61.8	46.7	67.8
	Ideal	7.0	41.8	25.6	41.9	10.9	18.6	12.8	32.3
Acad + Clin	Current	36.8	13.9	20.5	4.0	26.6	22.9	28.5	15.2
	Ideal	45.6	35.4	46.2	47.3	39.1	53.4	43.0	47.2
No Choice	Current	3.5	6.4	2.6	0.0	0.0	0.9	2.3	1.8
	Ideal	5.3	3.8	7.7	0.0	6.3	4.2	6.7	1.4
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

From Table 2, there was consensus among OT academia (66.7%) and clinical (89.2%), and PT academia (54.7%) and clinical (61.8%) regarding the practitioners having primary responsibility for developing the goals and objectives of the clinical rotation. There was a difference between

MT academia (7.0%) and clinical (41.8%) addressing the same issue. In terms of the current and ideal practices, there were perceptual differences between OT academia (66.7%/25.6%), OT clinical (89.2/41.9%), PT academia (54.7/10.9%) and PT clinical (61.8/18.6%).

Since only 13.9% of the MT practitioners and 36.8% of the educators stated that clinical goals and objectives were developed jointly, this does reflect a meaningful difference. In addition there were differences noted between the current and ideal practices being performed as a joint function in all the groups except MT academia (36.8/45.6%) and PT academia (26.6/39.1%).

Survey Question: Rank the following purposes of incorporating the clinical education experience into the curricula?

TABLE 3

RANKING OF RATIONALE FOR INCORPORATING CLINICAL EDUCATION EXPERIENCE IN CURRICULA

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Provide "Real-World" Opportunities	71.9	79.7	71.8	87.8	82.8	83.9	77.6	83.8
Provide Patient/ Client Contacts	8.8	7.6	20.4	6.8	17.2	12.7	12.7	8.9
Provide Additional Exposure to Equipment and Instruments	15.8	8.9	2.6	2.7	0.0	2.5	6.1	4.4
Other	3.5	3.8	5.2	2.7	0.0	0.9	3.6	2.9
n =	57	79	39	74	64	118	160	271

There was consensus among all groups that the primary purpose of incorporating the clinical experience phase into the curricula was to provide students with "real-world" exposure opportunities.

Survey Question: Rank the following factors which determine the content of the clinical education activities?

TABLE 4

RANKING OF FACTORS DETERMINING CLINICAL ACTIVITIES

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Previously Established Goals and Objectives	49.1	27.8	25.6	16.3	48.4	39.0	43.0	29.5
Mandates of Program Essentials	36.8	51.9	59.0	70.3	35.9	39.0	41.8	51.3
Availability of Human Resources at Clinicals	15.8	6.3	5.1	5.4	7.8	12.7	4.2	8.9
Availability of Physical Resources at Clinicals	8.8	6.3	2.6	4.1	0.0	7.6	3.6	6.3
Other	5.3	1.3	0.0	1.4	6.3	1.7	4.1	1.5
n =	57	79	39	74	64	118	160	271

For the following administrators, greater than half of the responding administrators indicated that the "mandates of program Essentials" were the primary factors determining the content of the clinical experience activities: MT clinical (51.9%), OT academia (59.0%) and OT

clinical (70.3%). For MT academia (49.1%) and PT academia (48.4%), previously established goals and objectives appeared as the dominate factor although the percent difference was small. For PT, 39.0% of the clinical administrators stated that the Essentials was the factor used in determining the content of the clinical experience activities. An equal 39.0% of the PT clinical administrators noted that previously established goals and objectives were the key elements. In addition, there was a meaningful difference noted between MT academia (49.1%) and clinical (27.8%) regarding previously established goals and objectives determing the activities for clinical education.

Survey Question: Who determines/should determine the clinical education activities?

TABLE 5

RESPONSIBILITY FOR DETERMINING CLINICAL ACTIVITIES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	38.6	22.8	15.4	13.5	39.0	21.2	33.3	19.6
	Ideal	36.8	13.9	5.1	6.8	23.5	12.7	23.6	11.6
*Clinical	Current	31.6	58.2	51.3	82.5	48.8	66.6	43.1	68.8
	Ideal	22.8	57.7	41.0	58.1	45.2	55.1	35.7	57.1
Acad + Clin	Current	29.8	15.2	23.1	2.7	9.4	7.6	19.4	8.6
	Ideal	35.1	25.3	46.2	33.8	25.0	28.0	33.9	29.1
No Choice	Current	0.0	3.8	10.3	1.4	2.9	4.6	4.2	3.0
	Ideal	5.3	3.1	7.7	1.4	6.3	4.2	6.8	2.2
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

The majority of the following groups indicated that the current practice of determining the learning experience activities for the clinical component was assumed primarily by the practitioners: MT clinical (58.2%), OT academia (51.3%) and clinical (82.5%), and PT

clinical (66.6%). There were meaningful differences between academia and clinical for current practices for MT (31.6/58.2%) and OT (51.3/82.5%); and ideal practices for MT (22.8/57.7%) as being primarily the practitioner's responsibility.

In addition, there was general agreement among all groups, except for the ideal practices for MT academia (36.8%) and clinical (13.9%), that academia was not primarily responsible for determining the clinical experience learning activities.

Although the overall percentages were low for this responsibility as being a joint effort, there were differences between OT academia (23.1%) and clinical (2.7%) in current practice, and differences between current and ideal practices for OT clinical (2.7/33.8%).

Survey Question: Who develops/should develop the assessment mechanisms for the clinical education experience?

TABLE 6

RESPONSIBILITY FOR DEVELOPING CLINICAL ASSESSMENT MECHANISMS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	49.1	38.0	33.3	23.0	65.7	76.3	50.9	50.7
	Ideal	38.6	22.8	18.0	9.5	46.6	31.3	34.6	23.2
*Clinical	Current	22.8	44.4	25.7	36.5	9.4	9.3	17.6	27.0
	Ideal	10.6	44.3	25.6	33.8	7.8	11.0	12.8	27.4
Acad + Clin	Current	28.1	15.8	23.1	27.0	23.4	13.6	24.8	17.8
	Ideal	45.6	29.1	38.5	51.4	40.9	54.3	43.0	46.8
No Choice	Current	0.0	1.8	17.9	13.5	1.6	0.8	6.7	4.5
	Ideal	5.3	3.8	17.9	5.4	4.7	3.3	9.6	2.6
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

The greatest percentage of the academic administrators (MT 49.1%, OT 33.3% and PT 65.7%) indicated that the assessment mechanisms for the clinical experiences were developed primarily by educators. However,

while the PT (76.3%) clinical administrators indicated that this activity was performed by educators, the majority of the MT clinical (44.4%) and OT clinical (36.5%) administrators indicated that this activity was performed primarily by the practitioners.

Differences were noted between MT academia (22.8%) and clinical (44.4%) in current practices, and ideal practices for MT academia (10.6%) and clinical (44.3%) whereby the clinical administrators were stating that they develop and should develop the assessment mechanisms.

In addition, perceptual differences existed between current and ideal practices around the educator's responsibility for developing the clinical education assessment mechanisms: PT academia (65.7/46.6%) and PT clinical (76.3/31.3%); and around mutual responsibilities, for OT clinical (27.0/51.4%) and PT clinical (13.6/54.3%) administrators.

Survey Question: Who determines/should determine the success criteria or standards for the clinical education rotation.

TABLE 7

RESPONSIBILITY FOR DETERMINING CLINICAL SUCCESS CRITERIA

Responses	Prac-tice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	52.6	35.4	30.8	21.6	62.5	46.6	51.0	36.6
	Ideal	42.1	19.0	12.8	8.2	37.5	22.1	33.9	17.6
*Clinical	Current	14.1	39.2	30.8	50.0	11.0	26.3	16.4	36.6
	Ideal	8.8	48.2	23.1	37.9	17.2	15.3	15.2	31.5
Acad + Clin	Current	33.3	21.5	25.6	21.6	20.3	22.0	25.5	21.9
	Ideal	43.9	29.1	51.3	51.4	40.6	58.5	42.4	48.7
No Choice	Current	0.0	3.8	12.8	6.8	6.3	5.1	7.1	4.9
	Ideal	5.3	3.8	12.8	2.5	4.7	4.2	8.5	2.2
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

The majority of the responding academic administrators, MT (52.6%) and PT (62.5%), stated that the current practice for determining the success criteria or standards for the clinical education rotation was assumed primarily by academia. However, Table 7 shows that OT academia

had no preference. The academic administrators (MT 43.9%, OT 51.3% and PT 40.6%) indicated that ideally the success criteria should be determined jointly.

The current practices for determining the success criteria for clinical education as indicated by MT (39.2%) and OT (50.0%) clinical facility administrators were primarily their responsibility, and PT (46.6%) clinical facility administrators as primarily the educator's responsibility.

Differences were noted in current practices as being primarily the practitioners for MT academia (14.1%) and clinical (39.2)%. In addition, meaningful differences were noted in ideal practices as being primarily the educators for MT academia (42.1%) and clinical (19.0%); and MT academia (8.8%) and clinical (48.2%) as being primarily the practitioners.

In addition, there were perceptual differences between current and ideal practices as primarily the educator's responsibility for PT academia (62.5/37.5%); and as primarily a joint function for OT academia (25.6/51.3%) and clinical (21.6/51.4%), and PT academia (20.3/40.6%) and clinical (22.0/58.5%).

Survey Question: Who is/should be responsible for evaluating the student performance at the clinical site?

TABLE 8

RESPONSIBILITY FOR EVALUATION OF STUDENT'S CLINICAL PERFORMANCE

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	14.1	2.5	5.2	1.4	1.6	0.0	6.7	1.1
	Ideal	12.3	2.6	2.6	1.4	3.2	0.0	6.0	1.1
*Clinical	Current	70.1	92.4	87.2	98.6	96.9	94.0	84.5	95.2
	Ideal	59.7	88.6	82.1	94.6	84.3	86.4	74.5	90.6
Acad + Clin	Current	15.8	2.5	5.1	0.0	1.5	5.1	7.3	3.0
	Ideal	22.8	5.1	7.7	4.1	7.8	10.2	13.3	7.1
No Choice	Current	0.0	2.6	2.6	0.0	0.0	0.8	1.5	0.7
	Ideal	5.3	3.8	7.7	0.0	4.7	3.3	6.2	1.2
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

It is apparent from Table 8 that there was consensus among both the academic and clinical administrators (70.1% to 98.6%) for current practices and (59.7% to 94.6%) for ideal practices that the responsibility for evaluating student performances at the clinical site was and

should be primarily the practitioner's responsibility. Although there were differences noted in current practices between MT academia (70.1%) and clinical (92.4%) and in ideal practices for MT academia (59.7%) and clinical (88.6%), nevertheless, there was consensus that the responsibility for this activity was and should continue to be the practitioners.

Survey Question: Who assigns/should assign the grades for the clinical education component?

TABLE 9

RESPONSIBILITY FOR CLINICAL GRADE ASSIGNMENT

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	40.4	14.0	64.1	54.1	71.9	60.2	57.5	45.2
	Ideal	31.5	5.1	38.5	24.4	53.1	27.2	41.4	20.4
*Clinical	Current	40.3	77.3	28.2	43.3	20.4	29.7	28.5	47.2
	Ideal	40.4	77.3	30.8	60.9	18.7	39.9	28.7	58.7
Acad + Clin	Current	19.3	5.1	2.6	2.6	3.1	5.1	9.1	3.7
	Ideal	22.8	11.4	20.5	10.8	17.2	26.3	20.1	18.1
No Choice	Current	0.0	3.6	5.1	0.0	4.7	5.1	4.9	3.9
	Ideal	5.3	6.2	10.3	3.9	11.0	6.6	9.8	2.8
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

It is apparent from Table 9 that the majority of the administrators for OT academia (64.1%) and clinical (54.1%), and PT academia (71.9%) and clinical (60.2%) indicated that the responsibility of assigning student grades for the clinical component should be primarily

academia's. The majority of MT clinical administrators (77.3%) indicated that this activity was performed primarily by the practitioners.

In terms of the ideal situation, the administrators of OT academia (38.5%) and PT academia (53.1%) indicated that ideally assigning clinical grades should be primarily the educators; MT academia (40.4%) and clinical (77.3%), OT clinical (60.9%), and PT clinical (39.9%) indicated that this activity should be performed by the practitioners.

In addition, there were meaningful differences noted in current practices between academic and clinical administrators for MT academia (40.4%) and clinical (14.0)% as primarily the educator's responsibility and for MT academia (40.3%) and clinical (77.3%) as primarily practitioner's responsibility. For ideal practices, MT academia (31.5%) and clinical (5.1%), and PT academia (53.1%) and clinical (27.2%) indicated that the assignment of the clinical grade should be primarily the educator's responsibility. The administrators for MT academia (40.4%) and clinical (77.3%), OT academia (30.8%) and clinical (60.9%), and PT academia (18.7%) and clinical (39.9%) indicated this function should be primarily the practitioners.

Meaningful differences were noted between current and ideal practices as being primarily the educators for OT clinical (54.1/24.4%) and PT clinical (60.2/27.2%). Although the percentages were low, there were also perceived differences between current and ideal practices as a joint responsibility for PT clinical (5.1/26.3%).

RESEARCH QUESTION #2: ETHICS AND LAW

Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the ethical and legal issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

Survey Question: Rank the type of affiliation agreement most suitable to your institutional needs.

TABLE 10

RANKING OF THE TYPE OF AFFILIATION AGREEMENT USED

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Formal Contract	71.9	78.9	59.0	81.1	84.5	92.4	78.2	87.1
Memorandum	19.3	16.3	38.4	13.5	10.9	5.9	17.6	10.0
Verbal	1.8	1.3	2.6	1.4	1.6	0.0	1.8	0.7
Business Letter	3.5	2.2	0.0	2.7	1.4	0.0	0.6	0.7
Other	3.5	1.3	0.0	1.4	1.6	1.7	1.8	1.5
No Choice	0.0	8.8	10.2	0.1	4.8	0.0	6.1	2.6
n =	57	79	39	74	64	118	160	271

There was consensus among the administrators, MT academia (71.9%) and clinical (75.9%), OT academia (59.0%) and clinical (81.1%), and PT academia (84.5%) and clinical (92.4%), that for most academic and clinical institutions the formal contract was the most suitable type of affiliation agreement.

The only meaningful difference was indicated by OT academic (59.0%) and clinical (91.1%) administrators.

Survey Question: Check as many as applicable who are authorized to sign the affiliation agreement on behalf of the academic institution?

TABLE 11

ACADEMIC INSTITUTION'S SIGNATURE AUTHORIZATION

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Dean	59.5	41.8	56.4	32.4	48.4	34.7	54.5	36.2
Department Chair	43.9	44.3	43.6	37.8	60.9	53.4	49.7	46.5
President	55.4	31.6	41.0	25.7	37.5	29.7	44.2	29.2
Education Coordinator	7.0	15.2	12.8	17.6	25.0	24.6	15.8	19.9
Legal Counsel	10.5	5.1	25.6	6.8	17.2	6.8	16.4	6.3
Do Not Know	0.0	15.2	0.0	23.0	0.0	14.4	0.0	17.0
Other	24.6	8.9	33.3	5.4	23.4	4.2	25.2	5.9
n =	57	79	39	74	64	118	160	271

For 59.6% of MT academia and 56.4% of OT academia, the dean was cited most frequently as having the power to sign affiliation agreement on behalf of the academic institution. For 60.9% of the PT academia,

the chairman of the academic program was cited most frequently as having signature authority. There was a consensus among the clinical facility administrators, MT (44.3%), OT (37.8%) and PT (53.4%), that the chairman of the academic program was authorized to sign the affiliation agreement on behalf of the academic institution.

Discrepancies can be noted between MT academia (54.4%) and clinical (31.6%) regarding the president of the academic institution having signature authorization. A similar pattern can be noted for OT academia (56.4%) and clinical (32.4%) whereby the dean of the academic program was authorized to sign the affiliation agreement.

Survey Question: Check as many as applicable who are authorized to sign the affiliation agreement on behalf of the clinical institutions.

TABLE 12

CLINICAL INSTITUTION'S SIGNATURE AUTHORIZATION

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
President/ Administrator	77.5	70.9	64.1	60.8	76.6	75.4	72.7	70.1
Department Head	19.3	16.5	41.0	56.8	51.6	49.2	37.0	4.7
Medical Director	42.1	41.8	38.5	14.9	23.4	9.3	33.3	20.3
Clinical/Education Coordinator	24.6	20.3	12.8	18.9	18.8	17.8	19.4	18.8
Legal Counsel	10.5	2.5	15.4	16.2	6.3	14.4	9.7	11.4
Do Not Know	1.8	2.5	5.1	0.0	6.3	0.0	5.5	0.7
Other	7.0	8.9	20.5	13.5	3.1	14.4	8.5	12.5
n =	57	79	39	74	64	118	160	271

There was consensus among all the academic and clinical program administrators that the practitioner was authorized to sign the affiliation agreement on behalf of the clinical institution: MT (77.5/70.9%), OT (64.1/60.8%) and PT (76.6/75.4%).

Survey Question: Check as many as applicable content items that are included in the affiliation agreements.

TABLE 13

AFFILIATION AGREEMENT CONTENT

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Institutional Rights and Responsibilities	96.5	83.5	94.9	98.6	93.8	96.6	94.5	93.4
Agreement Termination Process	91.2	93.5	87.2	71.6	93.8	89.8	90.9	83.0
Student Rights and Responsibilities	71.9	70.9	84.6	96.5	79.7	89.0	78.2	83.0
Malpractice Coverage	71.9	65.9	84.6	79.7	78.1	91.5	76.4	80.5
Dispute Resolving Mechanisms	57.9	54.4	69.2	56.8	70.3	68.6	64.8	61.3
Financial Arrangements	73.7	64.6	56.4	52.7	56.3	63.6	61.8	60.9
Number of Students Assigned During a Period	71.9	65.8	15.4	20.3	25.0	26.3	38.8	36.2
Do Not Know	3.5	2.5	0.0	1.4	0.0	0.8	1.2	1.5
Other	10.5	3.8	17.9	1.4	1.6	7.6	8.5	4.8
n =	57	79	39	74	64	118	160	271

There was consensus among the academic and clinical program administrators that the following content areas were included in the affiliation agreement: institutional rights and responsibility (83.5 to 98.6%); agreement termination process (71.6 to 93.8%); student rights and responsibilities (70.9 to 89.0%); malpractice coverage (65.9 to 91.5%); dispute resolving mechanisms (54.4 to 70.3%); financial arrangements (52.7 to 73.7%); and the number of students assigned to a clinical facility for a designated period (20.3 to 71.9%).

Although there was agreement between the academic and clinical program administrators, MT academia (71.9%) and clinical (65.8%), OT academia (15.4%) and clinical (20.3%), and PT academia (25.0%) and clinical (26.3%), regarding inclusion in the affiliation agreement of the number of students assigned to a clinical site for a period of time, it was interesting to note the relatively low percentages for the OT and PT programs.

Survey Question: Should an affiliation agreement contain a statement indicating that students have the status of a learner and may not render service beyond the scope of its educational value?

TABLE 14

INCLUSION OF "STUDENT STATUS" STATEMENT IN AFFILIATION AGREEMENTS

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	66.7	63.3	28.2	35.1	34.4	36.4	43.9	43.9
Sometimes	7.0	3.8	5.1	5.4	9.4	6.8	7.3	5.5
No/Never	21.1	27.8	56.4	52.7	46.9	50.0	40.9	44.3
No Choice	5.3	5.1	10.3	6.8	9.4	6.8	7.9	6.3
n =	57	79	39	74	64	118	160	271

There was agreement between MT academic (66.7%) and clinical (63.3%) program administrators regarding inclusion of the "student as a learner" status in the affiliation agreements. The greatest percentage of the OT academic (56.4%) and clinical (52.7%) program administrators, and PT academic (46.9%) and clinical (50.0%) program administrators indicated that the student status statement was not included in the affiliation agreements.

Survey Question: Check as many as applicable reasons for maintaining an affiliation agreement?

TABLE 15

RATIONALE FOR MAINTAINING AFFILIATION AGREEMENTS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Defines Duties and Obligations	91.8	74.3	94.9	86.5	92.2	79.7	92.1	79.7
Meets Institutional Requirements	80.7	72.2	89.7	79.7	89.1	72.9	86.1	74.5
Assures Availability of Sites	78.9	50.6	59.0	35.1	56.3	53.4	64.8	47.6
Protects Student's Rights	57.9	32.9	69.2	36.5	54.7	39.8	59.4	36.9
Insures Awareness of Established Educational Objectives	59.6	50.6	56.4	50.0	48.4	58.5	53.9	53.9
Provides Proof of Participation in Educational Activities	52.6	49.4	56.4	47.3	50.0	50.0	51.5	49.1
Other	22.8	15.2	12.8	17.6	10.9	16.1	15.2	16.2
n =	57	79	39	74	64	118	160	271

The primary (74.3 to 94.9%) reason for maintaining affiliation agreements, as indicated by both the academic and clinical administrators, was to define duties and obligations. The second (72.2 to 89.7%) most frequently given reason was that formalizing affiliation agreements met clinical institution's requirements. Excluding OT clinical (35.1%), the third (50.6 to 78.9%) most frequently cited reason for maintaining agreement was that it assured academia the availability of clinical sites. The fourth (54.7 to 69.2%) reason, protecting student's rights, ranked relatively high among the academic program administrators, but not as high (32.9 to 39.8%) among the clinical administrators. Insuring awareness of established educational objectives ranked fifth (48.4 to 59.6%), and providing proof of institutional participation ranked sixth (49.4 to 56.4%).

Perceptual differences were noted between MT academia (78.9%) and clinical (50.6%), and OT academia (59.0%) and clinical (35.1%) with regarding to the use of the affiliation agreement as a means of assuring availability of clinical sites to academia. For MT academia (57.9%) and clinical (32.9%), and OT academia (69.2%) and clinical (36.5%), the reason for maintaining affiliation agreements was primarily for the protection of student's rights.

Survey Question: Do students receive or have an opportunity to read the affiliation agreement?

TABLE 16

AVAILABILITY OF AFFILIATION AGREEMENTS TO STUDENTS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	12.3	7.6	38.5	33.8	40.6	29.7	29.9	24.4
Sometimes	3.5	6.3	20.5	12.2	29.7	16.9	18.9	12.5
No/Never	78.9	73.4	41.0	47.3	29.7	44.1	49.4	53.5
No Choice	5.3	12.7	0.0	6.8	0.0	9.3	1.8	9.6
n =	57	79	39	74	64	118	160	271

The majority of the administrators of MT academia (78.9%) MT clinical (73.4%) and OT clinical (47.3%) indicated that students do not receive or even have an opportunity to read the affiliation agreements. Of the respondents, 59.0% of the OT academia and 70.3% of PT academia indicated that students receive or read affiliation agreements some to most of the time.

It is interesting to note that there was no consensus among the administrators for OT clinicals and PT clinicals regarding the issue of sharing of affiliation agreements with students.

Survey Question: Have you ever terminated a clinical affiliation agreement prior to the specified termination period?

TABLE 17

TERMINATION OF AFFILIATION AGREEMENT

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	21.1	10.1	56.2	47.3	65.6	16.1	48.2	22.9
Sometimes	5.3	1.3	7.7	2.7	4.7	0.0	5.5	1.1
No/Never	70.2	83.5	33.3	48.6	29.7	83.9	44.5	74.2
No Choice	3.5	5.1	2.8	1.4	0.0	0.0	1.8	1.8
n =	57	79	39	74	64	118	160	271

MT academia (70.2%) and clinical (83.5%), OT clinical (48.6%) and PT clinical (83.9%) indicated that they have never terminated a clinical agreement prior to the specified termination period. Surprisingly, 56.2% of the OT educators, 47.3% of OT practitionerss and 65.6% of PT educators indicated that they have terminated a clinical affiliation agreement prior to the specified termination period.

Survey Question: In the past five years, have you or your department ever been involved in malpractice or negligence litigation?

TABLE 18

INVOLVEMENT IN LITIGATION IN PAST FIVE YEARS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	0.0	7.6	0.0	0.0	1.6	13.6	0.6	8.1
Sometimes	0.0	1.3	0.0	1.4	1.6	0.8	0.6	1.1
No/Never	100.0	86.1	100.0	98.6	96.9	84.7	98.8	88.9
No Choice	0.0	5.1	0.0	0.0	0.0	0.8	0.0	1.8
n =	57	79	39	74	64	118	160	271

The majority of the educators (96.9 to 100.0%) and the practitioners (84.7 to 98.6%) indicated that within the last five years, neither they personally nor their department had been involved in litigation.

Survey Question: Has your institution ever been involved in malpractice or negligence litigation due to a student's error, conduct, etc.?

TABLE 19

INVOLVEMENT IN LITIGATION DUE TO STUDENT ACTION

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	0.0	1.3	2.6	1.4	4.7	3.4	2.4	2.2
Sometimes	0.0	0.0	0.0	0.0	1.6	0.0	0.6	0.0
No/Never	98.2	93.7	94.9	98.6	92.9	95.8	95.1	95.9
No Choice	1.8	5.1	2.6	0.0	0.8	0.8	1.8	1.8
n =	57	79	39	74	64	118	160	271

The majority (92.9 to 98.2%) of the academic program administrators and majority (93.7 to 98.6%) of the clinical program administrators indicated that their institutions have not been involved in litigation as a result of a student's error or conduct.

Survey Question: Who is/should be liable for the injury or wrong suffered by a patient in the course of the student clinical training?

TABLE 20

LIABILITY FOR PATIENT INJURY AS A RESULT OF STUDENT CONDUCT

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	36.8	19.0	15.4	10.9	26.6	12.7	27.3	14.2
	Ideal	29.8	21.5	5.1	13.6	18.7	16.1	19.6	17.0
*Clinical	Current	21.1	60.7	20.4	56.7	17.2	45.7	18.8	53.9
	Ideal	17.5	51.9	28.2	35.1	14.1	27.9	18.3	37.1
Acad + Clin	Current	29.8	11.4	20.6	20.3	40.6	33.1	30.9	23.6
	Ideal	36.8	19.0	33.3	44.6	45.3	51.7	38.4	40.4
No Choice	Current	12.3	8.9	43.6	12.1	15.6	8.4	23.0	8.3
	Ideal	15.8	7.6	33.4	6.8	21.9	4.2	23.8	5.5
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

With the exception of the MT academia (36.8%), there was agreement between the academic and clinical program administrators that the academic facility was not liable for the injury or wrong suffered by a patient in the course of the student clinical training. Although 56.7%

of the OT and 45.7% of the PT clinical program administrators indicated that they were liable for patient injury as a result of student conduct, only 21.1% of the MT, 15.4% of the OT, and 17.2% of the PT academic program administrators indicated that the clinical facilities were liable. The majority of the PT academic program administrators (40.6%) indicated that the current practice was for mutually shared liability. Ironically, 43.6% of the OT academic administrators did not indicate a preference.

Ideally, the academic and clinical program administrators agreed that academia should not be liable (5.1 to 29.8%). The greatest percentage of the academic (33.3 to 45.3%) and clinical (44.6 to 51.7%) program administrators indicated that ideally both the academic and clinical programs should be liable for patient injury occurring as a result of student conduct during clinical education. However, 51.9% of the MT practitioners indicated that the liability for patient injury should be the clinical facility's responsibility.

There were meaningful differences noted between the educators and practitioners for current practices as primarily the practitioner's responsibility for MT (21.1/60.7%), OT (15.4/56.7%) and PT (17.2/45.7%). There were differences noted between OT academia (43.6%) and clinical (12.1%) as indicating no preference. In addition, there were perceptual differences between current and ideal practices for OT clinicals (56.7/35.1%) as being primarily the clinicals responsibility and for OT clinicals (20.3/44.6%) as primarily a mutual liability.

Survey Question: Are students required to carry professional liability during their clinical experience phase?

TABLE 21

STUDENT LIABILITY COVERAGE

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	56.1	36.7	87.2	83.8	81.3	77.1	72.0	66.4
Sometimes	0.0	0.0	2.6	0.0	3.1	0.0	1.8	0.0
No/Never	43.9	60.8	10.3	16.2	15.6	22.9	25.0	32.1
No Choice	0.0	2.5	0.0	0.0	0.0	0.0	1.2	1.5
n =	57	79	39	74	64	118	160	271

The majority of the administrators for OT academia (87.2%) and clinical (83.8%), and PT academia (81.3%) and clinical (77.1%) indicated that students were required to carry professional liability during their clinical education assignment. However, only 56.1% of MT academia and 36.7% of the MT clinicals required this coverage. The majority (60.8%) of the MT clinicals did not require students to carry professional liability.

Survey Question: Is professional liability coverage provided for students by the clinical site during their clinical experience phase?

TABLE 22

CLINICAL LIABILITY COVERAGE FOR STUDENTS WHILE AT CLINICAL SITE

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	61.4	55.7	43.6	41.9	53.1	42.4	54.3	46.1
Sometimes	3.5	2.5	7.7	5.4	10.9	1.7	7.3	3.0
No/Never	31.5	38.0	46.2	51.4	34.4	53.4	36.0	48.3
No Choice	3.5	3.8	2.6	1.4	1.6	2.5	2.4	2.6
n =	57	79	39	74	64	118	160	271

There was consensus between MT academia (61.4%) and clinical (55.7%) that the clinical facility provided students with professional liability coverage most of the time. For OT 46.2% of academia and 51.4% of the clinicals indicated that liability coverage for students was not provided. It is interesting to note that 53.1% of PT educators stated that student professional liability coverage was provided for students by the clinical facilities, yet 53.4% of the practitioners stated that coverage was not provided.

Survey Question: Is professional liability coverage provided by the clinical sites for the academic faculty instructing students at the clinical facility?

TABLE 23

CLINICAL LIABILITY COVERAGE FOR ACADEMIC FACULTY INSTRUCTING AT CLINICAL SITE

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	43.9	11.4	35.9	25.7	39.1	23.7	40.9	20.7
Sometimes	1.8	0.0	15.4	2.7	9.4	0.0	7.9	0.7
No/Never	36.8	65.8	46.2	48.6	45.3	64.4	42.1	60.5
No Choice	17.5	22.8	2.6	23.0	6.3	11.9	9.1	18.1
n =	57	79	39	74	64	118	160	271

The majority of the academic program administrators, MT (43.2%), OT (35.9%), and PT (39.1%), indicated most of the time the clinical facility provides professional liability coverage for faculty from academic institutions instructing students at the clinical facilities. However, the clinical administrators, MT (65.8%), OT (48.6%) and PT (64.4%) indicated that the clinical facilities do not extend this coverage to faculty from academic institutions.

Although there was agreement between educators and practitioners for OT academia (46.2%) and clinical (48.6%), and PT academia (45.3%) and clinical (64.4%) regarding clinical facilities not providing liability coverage to faculty from academic institutions, there was a difference noted between MT academia (36.8%) and clinical (65.8%).

Survey Question: Who is/should be responsible for insuring student clinical professional competence?

TABLE 24

RESPONSIBILITY FOR INSURING STUDENT CLINICAL COMPETENCE

Responses	Prac-tice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	52.6	20.3	25.7	10.8	42.2	16.1	41.8	16.0
	Ideal	24.5	10.1	5.1	5.5	7.8	5.9	12.8	7.1
*Clinical	Current	12.3	50.6	12.9	58.1	11.0	43.2	11.5	49.8
	Ideal	24.6	67.1	61.6	60.8	39.0	62.7	39.6	63.7
Acad + Clin	Current	35.1	26.6	53.8	29.7	46.9	39.8	44.2	33.5
	Ideal	43.9	17.7	25.6	33.8	48.4	30.5	41.5	27.8
No Choice	Current	0.0	2.6	7.7	1.4	0.0	0.9	2.5	0.7
	Ideal	7.0	5.1	7.7	0.0	4.8	0.9	6.0	1.4
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus among the clinical administrators with regards to current and ideal practices that the practitioners assumed and should assume the responsibility of insuring clinical competence: MT (50.6/67.1%), OT (58.1/60.8%) and PT (43.2/62.7%). Except for the MT educators (52.6%), who stated that they assumed this responsibility.

The remainder of the academic administrators, OT (53.8%) and PT (46.9%) stated that this responsibility should be jointly performed. In addition, there was consensus among the current and ideal practices as indicated by PT academia (46.9/48.4%) that both educators and practitioners assumed and should assume the responsibility for insuring clinical competence. Also, 61.6% of the OT academic administrators indicated that ideally this responsibility should be the practitioners, while 43.9% of the MT academic administrators indicated this should be a mutual responsibility.

There were meaningful differences noted between academic and clinical administrators in current practices for MT academia (52.6) and clinical (20.3%), and PT academia (42.2%) and clinical (16.1%) as being primarily the educator's responsibility; for MT academia (12.3%) and clinical (50.6%), OT academia (12.9%) and clinical (58.1%), and PT academia (11.0%) and clinical (43.2%) as being primarily the practitioner's responsibility; and OT academia (53.8%) and clinical (29.7%) as being primarily a mutual responsibility. Ideally, meaningful differences were noted for MT academia (24.6) and clinicals (67.1%) as the practitioner's responsibility, and MT academia (43.9) and clinicals (17.7%) as a joint responsibility.

The meaningful differences between the current and ideal practices were noted for MT academia (52.6/24.5%), OT academia (25.7/5.1%) and PT academia (42.2/7.8%) as being primarily the educator's responsibility; for OT academia (12.9/61.6%) and PT academia (11.0/39.0%) as being primarily the practitioner's responsibility; and for OT academia (53.8/25.6%) being primarily a joint responsibility.

Survey Question: Are students required to wear patches and/or identification badges acknowledging them as students?

TABLE 25

REQUIREMENTS TO WEAR "IDENTIFICATION" BADGES

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	52.6	64.6	64.1	82.4	71.9	78.8	64.0	75.6
Sometimes	15.8	2.5	35.9	1.4	17.2	3.4	20.7	2.6
No/Never	31.6	29.6	0.0	16.2	7.8	16.1	14.0	19.9
No Choice	0.0	3.3	0.0	0.0	3.1	1.7	1.2	1.8
n =	57	79	39	74	64	118	160	271

There was consensus (52.6 to 82.4%) among all the program administrators that in most instances students were required to wear insignia patches or identification badges identifying them as students. There was a meaningful difference noted between OT academia (35.9%) and clinical (1.4%) with regards to this requirement being mandated some of the time.

Survey Question: Are students introduced to patients as "students"?

TABLE 26

INTRODUCTION OF STUDENTS TO PATIENTS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	33.3	36.7	74.4	75.7	39.1	63.6	45.7	59.0
Sometimes	33.3	20.3	20.5	14.9	56.3	25.4	39.6	21.0
No/Never	28.1	38.0	0.0	8.1	3.1	11.0	11.0	18.1
No Choice	5.3	5.1	5.1	1.4	1.6	0.0	3.7	1.8
n =	57	79	39	74	64	118	160	271

There was agreement between OT academia (74.4%) and clinical (75.7%) that students were introduced to patients as students in most instances. Although 63.6% of the PT clinicals affirmed this practice, only 39.1% of the PT academia stated that students were introduced as such. For PT, 56.3% of the educators and 25.4% of the practitioners stated that students were only sometimes introduced to patients as students. In both the latter instances, meaningful differences can be noted. In the case of MT, no preferences were indicated by the MT educators and practitioners.

Survey Question: Do students provide any patient services while assigned to the clinical facility?

TABLE 27

PATIENT SERVICES PROVIDED BY STUDENTS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	38.6	41.8	82.1	89.2	71.9	80.5	62.8	71.6
Sometimes	45.6	30.4	17.9	9.5	26.6	11.9	30.5	16.6
No/Never	12.3	25.3	0.0	1.4	1.6	5.1	5.5	10.0
No Choice	3.5	2.5	0.0	0.0	0.0	2.5	1.2	1.8
n =	57	79	39	74	64	118	160	271

There was consensus among the following program administrators that students provided services to the clinical facility: OT academia (82.1%) and clinical (89.2%), and PT academia (71.9%) and clinical (80.5%). For MT, 84.2% of the educators and 72.2% of the practitioners indicated the students provided services but at varying degrees.

Survey Question: Who monitors/should monitor student activities against student exploitation?

TABLE 28

MONITORING OF STUDENT ACTIVITIES AGAINST STUDENT EXPLOITATION

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	61.4	16.5	46.2	21.6	60.9	24.6	58.2	21.5
	Ideal	54.4	26.6	30.8	16.3	42.2	24.5	43.0	22.9
*Clinical	Current	12.3	39.2	12.8	39.2	6.2	34.8	9.7	37.4
	Ideal	8.8	31.6	10.2	28.4	4.7	19.5	7.2	25.6
Acad + Clin	Current	22.8	35.4	30.8	31.1	29.7	35.6	26.7	34.4
	Ideal	29.8	34.2	48.7	52.7	45.3	54.2	41.2	48.1
No Choice	Current	3.5	8.9	10.3	8.1	3.1	5.1	5.4	6.7
	Ideal	7.0	7.6	10.3	2.7	7.8	1.7	8.6	3.4
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

The majority of the educators, MT (61.4%), OT (46.2%) and PT (60.9%), indicated that the current practice for monitoring the balance between the student's dual roles as learner and as provider of services in the clinical setting was primarily the educator's responsibility.

Interestingly enough, few of the practitioners supported this view. In fact, 39.2% of the MT practitioners, 39.9% of the OT practitioners and 34.8% of the PT practitioners indicated that the clinical facilities assumed this responsibility. Only 35.6% of the PT practitioners stated that this was a mutual responsibility.

Ideally, the majority (55.4%) of MT academia and 44.2% of the PT academia, indicated that this should be the educator's responsibility. Both OT academia (48.7%) and PT academia (45.3%) stated that monitoring the balance between the student's dual roles should be a joint effort. For the clinical program, the majority of the OT (52.7%) and PT (54.2%) administrators indicated that this monitoring activity should be a joint effort. However, while 34.2% of the MT clinical administrators stated that this responsibility should be assumed jointly, 31.6% stated that this should be the practitioner's responsibility.

There were meaningful differences between educators and practitioners as noted in current practices for MT (61.4/16.5%), OT (46.2/21.6%) and PT (60.9/24.6%) for the educators assuming this responsibility, and MT (12.3/39.2%), OT (12.8/39.9%) and PT (6.2/34.8%) for the practitioners assuming this responsibility.

In the ideal setting, the only meaningful difference was noted for MT academia (54.4%) and clinical (26.6%) as the educator's responsibility. A perceptual difference between current and ideal practices was noted for OT clinical (31.1/52.7%) with regards to both academia and the clinical facility monitoring student activities against student exploitation.

Survey Question: Who assigns/should assign the grades for the clinical experience component?

TABLE 29

RESPONSIBILITY FOR ASSIGNMENT OF CLINICAL GRADES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	40.4	14.0	64.1	54.1	71.9	60.2	57.5	45.2
	Ideal	31.5	5.1	38.5	24.4	53.1	27.2	41.4	20.4
*Clinical	Current	40.3	77.3	28.2	43.3	20.4	29.7	28.5	47.2
	Ideal	40.4	77.3	30.8	60.9	18.7	39.9	28.7	58.7
Acad + Clin	Current	19.3	5.1	2.6	2.7	3.1	5.1	9.1	3.7
	Ideal	22.8	11.4	20.5	10.8	17.2	26.3	20.1	18.1
No Choice	Current	0.0	3.6	5.1	0.0	4.7	5.1	4.9	3.9
	Ideal	5.3	6.2	10.3	3.9	11.0	6.6	9.8	2.8
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

Majority of the administrators for OT academia (64.1%) and clinical (54.1%) stated that the current practice of assigning grades for the clinical experience component was primarily the responsibility of the educators. Although the clinical administrators of MT programs (77.3%)

indicated that this responsibility was the practitioner's, there was no consensus amongst the MT educators.

Ideally, the administrators of OT academia (38.5%) and PT academia (53.1%) indicated that the educators should assign clinical grades, however, the administrations of MT academia (40.4%), MT clinical (77.3%), OT clinical (60.9%) and PT clinical (39.9%) indicated that the responsibility for assigning clinical grades should be the practitioners.

Meaningful differences in current practices by educators assuming the responsibility for assigning clinical grades were noted between academic and clinical administrators for MT (40.4/14.0%); and MT (31.5/5.1%) and PT (53.1/27.2%) for ideal practices. Meaningful differences in current practices of practitioners assuming the responsibility of assigning clinical experience grades were noted between academic and clinical administrators for MT (40.3/77.3%); and MT (40.4/77.3%), OT (30.8/60.9%) and PT (18.7/39.9%) in ideal practices.

Perceptual differences between current and ideal practices were noted by OT academia (64.1/38.5%), OT clinical (54.1/24.4%) and PT clinical (60.2/27.20%) as being primarily the educator's responsibility.

Survey Question: Who is/should be responsible for student discipline during clinical experiences?

TABLE 30

RESPONSIBILITY FOR STUDENT DISCIPLINE

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	33.4	12.6	0.0	6.8	10.9	5.9	15.8	8.3
	Ideal	24.5	10.1	5.1	5.5	7.8	5.9	12.8	7.1
*Clinical	Current	28.1	64.5	59.0	79.7	51.5	61.9	45.5	68.6
	Ideal	24.6	67.1	61.6	60.8	39.0	62.7	39.6	63.7
Acad + Clin	Current	38.6	20.3	30.8	12.2	35.9	29.7	35.2	22.5
	Ideal	43.9	17.7	25.6	33.8	48.4	30.5	41.5	27.8
No Choice	Current	0.0	2.6	10.3	1.4	1.6	2.5	3.6	0.6
	Ideal	7.1	5.1	7.7	0.0	4.7	0.8	6.1	1.4
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was agreement among the administrators of the following programs that the responsibility for student discipline was and should be primarily the practitioners: MT clinical (64.5/67.1%), OT academia (59.0/61.6%) and clinical (79.7/60.8%), and PT clinical (61.9/62.7%).

The MT academic administrator's current and ideal practices (38.6/43.9%) indicated that student discipline was and should remain a joint function. Although 51.5% of the PT academic administrators indicated that the practitioners were responsible for student discipline during clinical education, 48.4% of the PT academic administrators stated that this should be a mutual responsibility.

Although there was a meaningful difference noted between current practices for MT academia (33.6%) and clinical (12.6%) as being primarily the educator's responsibility for student discipline, the percentages were relatively low. There were meaningful differences between current practices for OT academia (59.0%) and clinical (79.7%) in terms of the practitioners assuming primary responsibility for student discipline. There was no consensus between MT academia (28.1%) and clinical (64.5%).

In terms of the ideal situation of who should assume the responsibility for student discipline, again there were meaningful differences between MT academia (4.6%) and MT clinical (67.1%) as being primarily the practitioner's responsibility, and MT academia (43.9%) and clinical (17.7%) being primarily a mutual responsibility.

Survey Question: Who is/should be responsible for addressing student's complaints and grievances regarding instruction and/or evaluation of clinical education?

TABLE 31

RESPONSIBILITY FOR ADDRESSING STUDENT COMPLAINTS AND GRIEVANCES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	49.1	20.2	38.4	16.2	40.7	18.7	42.7	18.5
	Ideal	50.8	12.7	23.0	5.4	23.4	14.4	32.7	11.5
*Clinical	Current	8.8	48.1	0.0	32.4	3.1	22.9	4.2	33.0
	Ideal	43.9	38.0	10.2	36.5	9.4	19.5	7.2	29.7
Acad + Clin	Current	40.4	26.6	48.7	47.3	51.6	54.2	47.6	44.4
	Ideal	5.3	43.0	53.8	56.8	62.5	61.0	52.7	55.5
No Choice	Current	1.8	5.1	12.8	4.1	4.7	4.2	5.5	4.1
	Ideal	0.0	6.4	12.8	1.4	4.7	5.0	7.4	3.3
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

It is interesting to note that the majority of the administrators for both academia and clinical in current and ideal situations agreed that the responsibility for addressing student complaints and grievances

regarding instruction and evaluation of clinical education was and should be a joint responsibility as indicated in Table 31: current practice for OT (48.7/47.3%), ideal practice for OT academia (53.8%) and clinical (56.8%), current practice for PT academia (51.6%) and clinical (54.2%), ideal practice for academia (62.5%) and clinical (61.0%). Only MT academia indicated that for both the current and ideal practices, the educators were and should be responsible for addressing student's complaints and grievances. The MT clinical administrators indicated that the current practice was primarily the practitioner's (48.1%) but indicated that they preferred this practice to be a joint effort.

Meaningful differences can be noted for current practices for MT academia (49.1%) and clinical (20.2%), OT academia (38.4%) and clinical (16.2%), and PT academia (40.7%) and clinical (18.7%) as being primarily the educator's responsibility, and MT academia (8.8%) and clinical (48.1%), and OT academia (0.0%) and clinical (32.4%) as being primarily the practitioner's responsibility. In terms of the ideal situation, there was a difference between MT academia (50.8%) and clinical (12.7%) as being primarily the educator's responsibility.

Perceptual differences between current and ideal practices were noted by the MT academic administrators as being primarily the practitioner's responsibility (8.8/43.9%) and as a joint activity (40.4/5.3%).

RESEARCH QUESTION #3: FINANCE

Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the fiscal issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

Survey Question: Who pays/should pay for the commodities and supplies used by students at the clinical site?

TABLE 32

PAYMENT OF COMMODITIES AND SUPPLY COSTS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	3.5	1.3	0.0	0.0	0.0	0.8	1.2	0.8
	Ideal	10.6	16.5	0.0	16.2	4.7	16.1	5.4	16.3
*Clinical	Current	89.5	91.1	84.6	93.2	89.0	87.2	87.9	90.4
	Ideal	64.9	53.2	82.0	59.5	78.1	57.6	74.6	57.0
Acad + Clin	Current	3.5	1.3	5.1	0.0	3.1	0.0	3.6	0.4
	Ideal	17.5	17.7	5.1	21.6	4.7	19.5	9.1	19.6
No Choice	Current	3.5	6.3	10.3	6.8	7.8	11.9	7.3	8.4
	Ideal	7.0	12.7	12.8	2.7	12.5	6.8	10.9	7.1
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus (84.6 to 93.2%) that the clinical facilities paid for commodities and supplies used by students during clinical instruction. Although there was consensus in the ideal categories regarding the clinical facilities assuming these costs (53.2 to 82.0%), there were meaningful differences noted between OT academia (82.0%) and

clinical (59.5%), and PT academia (78.1%) and clinical (57.6%). In addition, there were perceptual differences between the current and ideal practices for MT academia (89.5/64.9%), MT clinical (91.1/53.2%), OT clinical (93.2/59.5%) and PT clinical (87.2/57.6%) that the clinical facilities assumed and should continue to assume payment for commodities and supplies used by students during clinical education.

Survey Question: Who pays/should pay for the maintenance costs of the equipment and instruments used by students during their clinical training?

TABLE 33

PAYMENT OF MAINTENANCE COSTS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	3.5	1.3	0.0	0.0	0.0	0.0	1.2	0.4
	Ideal	3.5	12.7	0.0	6.8	3.7	11.0	2.4	10.3
*Clinical	Current	89.5	88.6	92.3	97.3	98.4	93.2	93.3	93.3
	Ideal	78.9	64.5	87.2	73.0	82.2	70.3	82.5	69.6
Acad + Clin	Current	3.5	2.5	0.0	0.0	0.0	0.0	1.2	0.7
	Ideal	10.5	10.1	5.1	16.1	4.7	14.4	6.6	13.7
No Choice	Current	3.5	7.6	7.7	2.7	1.6	6.8	4.3	5.6
	Ideal	7.0	12.7	7.7	4.1	9.4	4.2	8.5	6.4
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus (88.6 to 98.4%) that the clinical facilities assume the maintenance costs of equipment and instruments used by students during their clinical experience training. Although there was agreement that the clinical facility should assume this cost (64.5 to

7.2%) there were meaningful differences noted between the current and ideal practices for MT clinical (88.6/64.5%), OT clinical (97.3/73.0%) and PT clinical (93.2/70.3%).

Survey Question: Who pays/should pay for the repair costs of the equipment and instruments used by students during their their clinical training?

TABLE 34

PAYMENT OF REPAIR COSTS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	5.3	1.3	0.0	0.0	0.0	0.0	1.8	0.4
	Ideal	5.3	14.0	0.0	12.2	6.2	12.7	4.2	13.0
*Clinical	Current	89.5	89.9	87.2	97.3	96.9	93.2	91.5	93.7
	Ideal	75.4	64.5	82.0	66.3	79.7	68.6	78.8	67.1
Acad + Clin	Current	1.8	1.3	0.0	0.0	0.0	0.0	0.6	0.4
	Ideal	10.5	8.9	10.3	18.9	3.1	15.3	7.3	14.4
No Choice	Current	3.5	7.6	12.8	2.7	3.1	6.8	6.1	5.5
	Ideal	8.8	12.7	7.7	2.7	10.9	3.4	9.7	5.5
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus (87.2 to 97.3%) among the administrators that the clinical facilities assumed the repair costs of the equipment and instruments used by students during their clinical experience training.

Although there were no differences noted between of academic and clinical facility administrators, there were perceptual differences between the current and ideal practices for MT clinical (89.9/64.5%), OT clinical (97.3/66.3%) and PT clinical (93.2/68.6%).

Survey Question: Who pays/should pay the salaries of the clinical teaching staff?

TABLE 35

PAYMENT OF CLINICAL TEACHING STAFF SALARIES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	1.8	6.4	2.6	1.4	0.0	0.0	1.2	2.3
	Ideal	7.1	15.2	0.0	20.3	1.6	11.9	3.0	15.2
*Clinical	Current	82.5	83.6	84.6	90.5	92.2	89.8	86.6	88.5
	Ideal	63.2	55.7	82.1	41.9	78.2	53.4	74.0	51.2
Acad + Clin	Current	10.5	1.3	0.0	1.4	0.0	0.0	3.6	0.7
	Ideal	21.1	15.2	2.6	35.1	6.3	28.0	10.3	26.3
No Choice	Current	5.3	8.7	12.8	6.7	7.8	10.2	8.6	8.5
	Ideal	8.6	13.9	15.3	2.7	13.9	6.7	12.7	7.3
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus (82.5 to 92.2%) among the administrators that the clinical facilities paid the salaries for the clinical teaching staff. However, there was less agreement (41.9 to 82.1%) between the administrators in the ideal practice. Also, there were meaningful

differences noted in ideal practices between OT academia (82.1%) and clinical (41.9%), and PT academia (78.2%) and clinical (53.4%). In addition, there were perceptual differences between current and ideal practices for MT clinicals (83.6/55.7%), OT clinicals (90.5/41.9%) and PT clinicals (89.8/53.4%). In addition, a perceptual difference was also noted between current and ideal practices for OT clinical (1.4/35.1%) regarding both academia and the clinical facility paying the salaries of clinical staff with teaching responsibilities.

Survey Question: Does/should the academic institution provide ancillary teaching personnel to assist in the instruction of students at the clinical site?

TABLE 36

ANCILLARY CLINICAL TEACHING SUPPORT TO CLINICALS

Response	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	Current	29.8	11.7	5.1	1.4	0.0	4.2	11.6	5.6
	Ideal	24.6	21.5	10.3	13.5	4.7	18.6	12.9	18.1
Sometimes	Current	14.0	9.1	23.1	5.4	20.3	11.0	18.3	9.0
	Ideal	24.6	26.6	33.3	39.2	37.5	33.9	31.9	33.2
No/Never	Current	49.1	74.0	69.2	91.9	78.1	84.0	66.6	83.6
	Ideal	40.3	48.1	48.7	40.5	54.7	47.5	48.5	45.8
No Choice	Current	7.0	5.2	2.6	1.4	1.6	0.8	3.5	1.9
	Ideal	10.5	3.8	7.7	6.8	3.1	0.0	6.7	3.0
n =		57	79	39	74	64	118	160	271

There was agreement (49.1 to 91.9%) among the program administrators that academia does not provide ancillary clinical teaching support to the clinical facility. There were meaningful differences

noted in current practices between the administrators of academic and clinical facilities for MT academia (49.1%) and clinical (74.0%), and OT academia (69.2%) and clinical (91.9%). Meaningful differences between the current and ideal practice of academia not providing ancillary staff support were noted for the following: MT clinical (74.0/48.1%), OT academia (69.2/48.7%) and clinical (91.9/40.5%), PT academia (78.1/54.7%) and PT clinical (84.0/47.5%). Except for PT academia (45.3%), all the other program administrators indicated that ideally the academia should provide some assistance to the clinical facilities (51.3 to 61.4%). Further, there were perceptual differences noted between current and ideal practices by OT clinical (5.4/39.2%) and PT clinical (11.0/33.9%) as being desirous of some ancillary support by academia.

Survey Question: Do the academic faculty "visiting" the clinical facility actually participate in the clinical instruction of students?

TABLE 37

INSTRUCTION OF STUDENTS AT CLINICAL FACILITIES BY ACADEMIC LIAISONS

Response	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of Time	19.2	7.6	2.6	0.0	1.6	1.7	7.9	3.0
Sometimes	14.0	7.6	23.1	6.8	20.3	5.1	20.1	6.3
No/Never	59.9	79.8	74.4	91.9	76.6	93.2	68.8	88.7
No Choice	6.9	5.1	0.0	1.4	1.6	0.0	3.2	2.0
n =	57	79	39	74	64	118	160	271

There was consensus (59.9 to 93.2%) that the visiting academic faculty serving as clinical education liaisons did not participate in the instruction of students at the clinical site. In addition, there were meaningful differences between the practices as indicated by MT academia (59.9%) and clinical (79.8%) administrators.

Survey Question: Who pays/should pay the costs incurred by the clinical teaching staff for administrative clinical coordinating activities.

TABLE 38

PAYMENT OF ADMINISTRATIVE COORDINATING ACTIVITY COSTS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	31.6	13.9	20.5	4.1	9.4	2.5	20.0	6.3
	Ideal	28.1	27.8	69.3	25.7	11.0	26.3	16.3	26.6
*Clinical	Current	56.2	73.5	61.5	78.4	81.3	85.6	63.0	80.7
	Ideal	36.9	39.3	7.7	31.1	65.6	41.6	55.8	38.1
Acad + Clin	Current	12.3	1.3	2.6	4.1	0.0	0.0	3.6	11.5
	Ideal	21.1	19.0	7.7	40.5	10.9	23.7	13.9	27.0
No Choice	Current	0.0	11.4	15.4	13.5	9.4	11.9	13.4	1.5
	Ideal	14.0	14.0	15.4	2.7	12.5	8.5	14.0	8.3
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was consensus that the costs incurred by the clinical teaching staff for administrative clinical coordinating activities were assumed primarily by the clinical facilities (56.2 to 85.6%). However,

according to Table 38, the administrators indicates that academia should assume primary or at least more of the responsibility for the costs thereby reducing the responsibilities of the clinical facilities as indicated by the perceptual differences between the current and ideal practices (7.7 to 65.6%). In addition there were meaningful differences between current and ideal practices for MT clinical (73.5/39.3%), OT academia (61.5/7.7%), OT clinical (78.4/31.1%) and PT clinical (85.6/ 41.6%) that clinical institutions assumed primary cost responsibilities. There were meaningful differences in ideal practices between OT academia (7.7%) and clinical (31.1%) administrators, and the PT academic (65.6%) and clinical (41.6%) administrators.

In addition, perceptual differences were noted between current and ideal practices indicated that academia was assuming primary responsibilities as indicated by the administrators of OT academia (20.5/69.3%) and OT clinicals (4.1/25.7%). Also, there was a difference in ideal practices between OT academic (69.5%) and clinical (25.7%) administrators. In addition, there were differences between current and ideal practices with regards to the sharing of incurred costs for OT clinical (4.1/ 40.5%) and PT clinical (0.0/23.7%). Also, there was a perceptual difference noted between OT academic (7.7%) and clinical (40.5%) administrators in the ideal practices of sharing of incurred costs.

Survey Question: Who receives the student's tuition while s/he is on clinical assignment?

TABLE 39

RECIPIENT OF STUDENT'S TUITION DURING CLINICAL ROTATIONS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	82.5	78.5	82.1	94.6	92.2	90.7	86.1	89.2
	Ideal	57.9	34.2	69.3	21.6	70.4	38.1	66.0	32.6
*Clinical	Current	1.8	8.8	0.0	0.0	1.5	0.0	1.2	2.6
	Ideal	1.8	24.1	2.6	28.4	4.7	14.4	3.0	21.1
Acad + Clin	Current	8.8	0.0	2.6	2.7	0.0	0.0	3.6	0.7
	Ideal	31.6	27.8	12.8	44.6	14.1	34.7	19.4	35.6
No Choice	Current	7.0	12.6	15.4	2.7	6.3	9.3	9.1	7.5
	Ideal	8.8	14.0	15.4	5.4	10.9	12.7	11.5	10.7
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

There was a consensus (78.5 to 94.6%) among administrators that academia was the primary recipient of students' tuition. However, there were perceptual differences as indicated by administrators regarding academia receiving tuition monies in current and ideal practices: MT

academia (82.5/57.9%), PT academia (92.2/70.4%), MT clinical (78.5/34.2%), OT clinical (94.6/21.6%) and PT clinical (90.7/38.1%). There were meaningful differences with regard to academia receiving tuition in ideal practices as noted all the educators and practitionrs: MT academia (57.9%) and clinicals (34.2%), OT academia (69.3%) and clinical (21.6%), and PT academia (70.4%) and clinical (38.1%).

OT practitioners indicated a meaningful difference between current and ideal practices (0.0/28.4%) of sharing the student tuition. For the ideal practices, only the OT academic and clinical administrators reflected perceptual differences (2.6/28.4%) regarding clinical institutions receiving tuition. The educators and practitioners currently sharing tuition monies have also indicated that ideally clinical facilities should receive some or more of the student tuition: MT academia (8.8/31.6%), MT clinical (0.0/27.8%), OT clinical (2.7/44.6%) and PT clinical (0.0/34.7%). There were perceptual differences noted in ideal practices between the administrators of OT academia (12.8) and clinical (44.6%), and PT academia (14.1%) and clinical (37.7%).

Survey Question: Should financial reimbursement be of concern if a student's assignments is of short duration, that is less than a total of 40 hours?

TABLE 40

FISCAL REIMBURSEMENT FOR SHORT PERIODS OF CLINICAL EDUCATION ROTATIONS

Response	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of Time	5.3	17.7	5.1	14.9	6.3	18.6	6.1	17.3
Sometimes	17.5	24.1	20.5	16.2	3.1	16.9	12.2	18.8
No/Never	70.2	45.6	71.8	62.2	90.6	61.0	78.7	56.8
No Choice	7.0	12.7	2.6	6.8	0.0	3.4	3.0	7.0
n =	57	79	39	74	64	118	160	271

There was consensus among the administrators of both academic and clinical facilities that financial reimbursements for clinical rotations of short durations were not of concern (56.8 to 90.6%); the exception being the MT clinicals (45.6%). In addition, there were meaningful differences between the levels of unconcern as reflected by the academic and clinical administrator's responses (no/never): MT academia (70.2%) and clinical (45.6%), and PT academia (90.6%) and clinical (61.0%).

Survey Question: Rank the following financial reimbursement mechanisms.

TABLE 41

RANKING OF EQUITABLE FINANCIAL REIMBURSEMENT MECHANISMS

Academic Reimbursement Mechanisms	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Token Amount	26.3	12.7	10.3	6.8	20.3	16.1	20.6	12.5
Portion of Tuition	17.5	26.6	12.8	55.4	10.9	33.1	13.3	37.3
Teaching Commodity Expenses	8.8	15.2	5.1	5.4	14.1	8.5	9.7	9.6
Portion Clinical Staff Salary	7.0	20.3	2.6	20.3	0.0	24.6	3.0	22.1
Other	21.1	7.6	17.6	0.0	14.1	5.9	17.0	4.8
n =	57	79	39	74	64	118	160	271

There does not appear to be consensus or even preference in terms of proposed equitable financial reimbursement mechanisms, total academia (3.0 to 20.6%) and total clinical (4.8 to 37.3%). Overall academia indicated that token payments, 20.6% for academia and 12.5% for clinical, were generally preferred reimbursement mechanisms. Partial tuition payments and clinical staff salary considerations were two mechanisms preferred by practitioners (37.3%) but not necessarily by the educators (13.3%). Interestingly, meaningful differences were indicated between PT

academia (0.0%) and clinical (24.5%) regarding clinical staff salaries reimbursement. Differences also were noted between academic and clinical administrators with regards to partial tuition payment reimbursements for OT academia (12.8%) and clinical (55.4%), and PT academia (10.9%) and clinical (33.9%).

Survey Question: For this clinical rotation cycle, were financial matters of any concern to your institution?

TABLE 42

FISCAL CONCERNS

Response	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of Time	36.8	34.2	53.8	32.4	40.6	23.7	43.9	29.2
Sometimes	14.0	24.1	23.1	12.2	20.3	16.1	18.3	17.3
No/Never	40.4	36.6	17.9	50.0	39.1	57.6	33.5	49.4
No Choice	8.8	5.1	5.1	5.4	0.0	2.5	4.3	4.1
n =	57	79	39	74	64	118	160	271

Table 42 indicates that for this current clinical rotation cycle, financial matters were of greater concern to academic administrators (total 43.9%) than to clinical administrators (total 29.2%). Meaningful differences were noted between the "yes/most of times" responses of the OT educators (53.8%) and practitioners (32.4%). In addition, financial concerns were less of considerations for practitioners (49.4%) than for educators (33.5%). Meaningful differences were again noted between the "no/never" responses for OT academia (17.9%) and clinical (50.0%). Generally, financial concerns were only occassionally sometimes con-

sidered by administrators of both academic (18.3%) and clinical (17.3%) facilities. However, only the MT administrator indicated that infrequent fiscal concerns occurred among the clinical (24.1%) and academic (14.0%) facilities.

Survey Question: What indirect renumeration mechanisms are used by academia?

TABLE 43

INDIRECT REMUNERATION MECHANISMS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Acad Course Waivers	31.6	21.5	38.5	27.0	29.7	28.0	31.5	25.8
CE Reimbursement	28.1	25.3	30.5	41.9	29.7	38.1	28.5	35.4
Prof. Soc. Membership	14.0	15.2	2.6	10.8	14.1	9.3	10.9	11.4
Equip/Instr Purchase	3.5	10.1	0.0	4.1	3.1	9.3	2.4	8.1
Journal Subscription	10.5	3.8	0.0	1.4	4.7	2.5	1.8	2.6
n =	57	79	39	74	64	118	160	271

There was consensus that the most acceptable indirect remuneration mechanism for providing clinical education experiences was through academic course tuition waivers for the clinical teaching staff as indicated by educators (29.7 to 38.5%) and practitioners (21.5 to 29.7%). In addition, reimbursement by academia continuing education for expenses ranked relatively high for academia (28.1 to 30.5%) and for clinical (25.3 to 41.9%). No perceptual differences were noted between administrators of academic and clinical facilities.

Survey Question: Do you anticipate fiscal matters jeopardizing future clinical arrangements?

TABLE 44

FISCAL MATTERS JEOPARDIZING FUTURE CLINICAL ARRANGEMENTS

Response	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of Time	33.3	40.5	35.9	33.8	32.8	27.1	34.8	32.8
Sometimes	28.1	13.9	46.2	29.7	35.9	25.4	34.8	23.2
No/Never	36.8	40.5	15.4	35.1	29.7	46.6	28.7	41.7
No Choice	1.8	5.1	2.6	1.4	1.6	0.8	1.8	2.2
n =	57	79	39	74	64	118	160	271

Table 44 indicates that the administrators of academic and clinical facilities generally agreed, but to varying degrees (53.4 to 84.6%), that future clinical arrangements could be jeopardized by fiscal concerns. Interestingly, the educators of MT (36.8%), OT (15.4%) and PT (29.7%) programs expressed less of a concern for this issue than the practitioners of MT (40.5%), OT (35.1%) and PT 46.6%) programs.

RESEARCH QUESTION #4: ADMINISTRATION

Within the field of Medical Technology, Occupational Therapy and Physical Therapy, what are the administrative issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical/fieldwork experiences?

Survey Question: Is there effective/productive communication between affiliates?

TABLE 45

EFFECTIVE/PRODUCTIVE COMMUNICATION

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	86.0	78.5	74.4	63.5	90.6	84.7	85.4	77.1
Sometimes	10.5	16.5	25.6	33.8	9.4	14.4	13.4	19.3
No/Never	0.0	0.0	0.0	1.4	0.0	0.9	0.0	0.8
No Choice	3.5	5.1	0.0	1.4	0.0	0.0	1.2	2.8
n =	57	79	39	74	64	118	160	271

There was agreement between administrators of MT academia (86.0%) and clinical (78.5%), OT academia (74.4%) and clinical (63.5%), and PT academia (90.6%) and clinical (84.7%), that in most instances there was effective/productive communication between affiliates.

Survey Question: Are administrators responsive to the complaints and suggestions of affiliates?

TABLE 46

RESPONSIVENESS OF AFFILIATES COMPLAINTS AND SUGGESTIONS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	73.7	64.4	76.9	66.2	89.1	83.1	81.1	74.2
Sometimes	22.8	28.1	23.1	31.1	10.9	16.9	17.7	22.9
No/Never	0.0	1.3	0.0	1.4	0.0	0.0	0.0	0.7
No Choice	3.5	6.3	0.0	1.4	0.0	0.0	1.2	2.2
n =	57	79	39	74	64	118	160	271

The majority of the academic and clinical program administrators indicated that in most instances their affiliates were responsive to complaints and suggestions: MT academia (73.7%) and clinical (64.4%), OT academic (76.9%) and clinical (66.2%), and PT academia (89.1%) and clinical (83.1%).

Survey Question: Are academic institutions sensitive to the concerns and pressures exerted on the clinical institution?

TABLE 47

ACADEMIC SENSITIVITY TO PRESSURES EXERTED ON THE CLINICAL INSTITUTION

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	84.2	51.9	59.0	43.2	87.5	63.6	79.9	54.6
Sometimes	12.3	36.7	38.5	47.3	12.5	34.7	18.3	38.7
No/Never	0.0	8.9	2.6	8.1	0.0	0.8	0.6	5.2
No Choice	3.5	2.5	0.0	1.4	0.0	0.8	1.2	1.5
n =	57	79	39	74	64	118	160	271

Although there were meaningful differences between MT academia (84.2%) and clinical (51.9%), and PT academia (87.5%) and clinical (63.6%), nevertheless, the majority of the administrators indicated that in most instances academia was sensitive to the concerns and pressures exerted on the clinical facilities. For OT, while 59.0% of academia stated that in most instances academia was sensitive to clinical concerns, 47.3% of the clinicals indicated that academia was only responsive occasionally.

Survey Question: Are credentials considered prior to assigning clinical teaching responsibilities?

TABLE 48

CONSIDERATION OF CLINICAL TEACHING STAFF'S CREDENTIALS

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	82.5	78.5	89.7	79.7	81.3	83.9	84.1	81.2
Sometimes	8.8	10.1	7.7	12.2	15.6	11.9	11.0	11.4
No/Never	1.8	2.5	2.6	2.7	1.6	1.7	2.2	1.8
No Choice	6.9	8.9	0.0	5.4	1.5	2.5	2.7	5.6
n =	57	79	39	74	64	118	160	271

The majority of the program administrators (78.5 to 89.7%) indicated that the credentials of the clinical staff at the clinical facility are considered prior to assigning teaching responsibilities.

Survey Question: Are administrators aware of the average number of clinical staff hours spent per day on student teaching activities?

TABLE 49

AWARENESS OF TIME SPENT BY CLINICAL STAFF ON STUDENT TEACHING ACTIVITIES

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	73.7	75.9	53.8	82.4	37.5	78.8	54.3	79.0
Sometimes	17.5	15.2	28.2	10.8	51.6	14.4	34.1	13.7
No/Never	8.8	7.6	15.4	4.1	9.4	5.9	10.4	5.9
No Choice	0.0	1.3	2.6	2.7	1.6	0.8	1.2	1.5
n =	57	79	39	74	64	118	160	271

There was consensus between MT academia (73.7%) and clinical (75.9%), that in most instances program administrators were aware of the average number of clinical staff hours spent per day on teaching activities. There were meaningful differences noted for OT academia (53.8%) and clinicals (82.4%), and PT academia (37.5%) and clinicals (78.8%). The majority (51.6%) of PT academia stated that only occasionally were program administrators aware of the time spent by the clinical staff on student teaching activities.

Survey Question: Are administrators aware of the average number of clinical staff hours spent per day on non-teaching student activities?

TABLE 50

AWARENESS OF TIME SPENT BY CLINICAL STAFF ON NON-TEACHING ACTIVITIES

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	63.2	67.1	53.8	78.4	34.4	71.2	49.4	72.0
Sometimes	21.1	20.3	25.6	12.2	53.1	19.5	35.4	17.7
No/Never	14.0	11.4	17.9	6.8	10.9	8.5	13.4	8.9
No Choice	1.8	1.3	2.6	2.7	1.6	0.8	1.8	1.5
n =	57	79	39	74	64	118	160	271

Although there was agreement between MT academia (63.2%) and clinical (67.1%), regarding the degree of awareness by program administrators of the time spent by the clinical staff on non-teaching student related activities, there were meaningful differences noted for OT academia (53.8%) and clinical (78.4%), and PT academia (34.4%) and clinical (71.2%). The majority (53.1%) of PT academia stated that only sometimes were program administrators aware of the time spent on non-teaching student related activities.

Survey Question: Who establishes/should establish the policies governing the clinical component?

TABLE 51

RESPONSIBILITY FOR ESTABLISHMENT OF CLINICAL POLICIES

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	45.7	24.1	28.2	19.0	64.0	33.9	48.5	27.2
	Ideal	43.8	10.2	2.6	5.4	42.2	17.0	32.2	12.0
*Clinical	Current	14.1	45.5	28.2	55.4	9.4	32.2	15.8	42.5
	Ideal	5.3	53.1	28.2	33.8	11.0	25.4	13.4	36.3
Acad + Clin	Current	40.3	25.3	38.6	24.4	25.0	29.7	33.3	27.0
	Ideal	45.6	32.9	59.0	60.8	42.2	53.4	47.9	50.2
No Choice	Current	0.0	5.1	5.0	1.3	1.6	4.2	2.4	3.3
	Ideal	5.3	3.8	10.3	0.0	4.7	4.2	6.7	1.5
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

From Table 51, it is apparent that there was disagreement among program administrators regarding who has the responsibility for the policies governing the clinical component. The administrators for MT academia (45.7%), PT academia (64.0%) and PT clinical (33.9%) indicated

that this responsibility should be the educators; MT clinical (45.5%) and OT clinical (55.4%) stated that this responsibility should be the practitioners; and OT academia (38.6%) indicated that the responsibility for establishing the policies governing clinical education component should be shared.

All the program administrators, except for MT clinical (53.1%), stated that ideally the policies governing the clinical education component should be established by the educators and practitioners. The MT clinical administrators stated that ideally this responsibility should be the practitioners.

Survey Question: Who determines/should determine the duties and extent of authority for the clinical teaching staff?

TABLE 52

RESPONSIBILITY FOR DETERMINING DUTIES AND EXTENT OF AUTHORITY FOR THE CLINICAL TEACHING STAFF

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	31.6	12.7	17.3	2.8	20.4	12.7	22.6	10.0
	Ideal	35.1	6.4	7.7	2.7	6.2	9.3	16.3	6.7
*Clinical	Current	49.1	68.4	61.6	81.1	61.0	68.7	56.6	72.2
	Ideal	29.8	72.2	59.0	64.8	46.9	56.0	44.8	64.0
Acad + Clin	Current	19.3	16.5	15.4	14.9	17.2	16.1	18.4	15.9
	Ideal	29.8	17.7	20.5	32.4	42.2	30.5	31.5	27.7
No Choice	Current	0.0	2.6	5.7	1.2	1.4	2.5	2.4	1.9
	Ideal	5.3	3.8	12.8	0.0	4.7	4.2	7.3	1.6
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

Except for the MT academia (31.6%), the remainder of the program administrators indicated that the clinical facility administrators determined and should continue to determine the duties and extent of

authority of the clinical staff with teaching responsibilities. Table 52 supports these findings: MT clinical (68.4/72.2%), OT academia (61.6/59.0%), OT clinical (81.1/64.8%), PT academia (61.0/ 46.9%) and PT clinical (68.7/56%). For MT, 49.1% of the responding educators indicated that this responsibility was currently the practitioners, however, 35.1% indicated that ideally the educators should be responsible for determining the duties and extent of authority for the clinical staff with teaching responsibilities.

Meaningful differences were noted for the following: ideal practices for MT academia (35.1%) and clinical (6.4%) as primarily the educator's responsibility, and MT academia (29.8%) and clinical (72.2%) as primarily the practitioner's responsibility. There was a perceptual difference noted between current and ideal practice for PT academia (17.2/42.2%).

Survey Question: Rank the following factors that are used as the basis for assigning teaching responsibilities to clinical staff.

TABLE 53

RANKING OF THE BASIS FOR ASSIGNING TEACHING RESPONSIBILITIES TO CLINICAL STAFF

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Expressed Interest	38.6	29.1	30.5	9.5	32.8	23.7	34.2	21.4
Credentials	45.6	29.0	30.8	36.5	21.9	31.4	33.3	32.1
Experience	8.8	20.3	28.2	39.2	39.1	33.9	24.8	31.1
Coincides with Work Assignment	7.0	6.3	7.6	8.1	4.7	4.2	4.8	5.9
Title/Position	3.5	11.4	2.9	6.7	1.5	6.8	1.8	8.5
Used	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	3.8	0.0	0.0	0.0	0.0	1.1	1.0
n =	57	79	39	74	64	118	160	271

According to Table 53, there was great disparity noted among the program administrators regarding the factors used for assigning teaching responsibilities to the clinical staff.

Assignment of teaching responsibilities based on the clinical staff's was the primary choice for MT academia (45.6%) and OT academia (30.8%); second choice for OT clinical (36.5%) and PT clinical (31.4%); and third for PT academia (21.9%). Expressed interest ranked second for MT academia (38.6%), OT academia (30.5%), and PT academia (32.8%). For MT clinical, expressed interest (29.1%) ranked equally to consideration of credentials (29.0%). Assignment of teaching responsibilities to the clinical staff based on previous work experience ranked as the primary factor for OT clinical (39.2%), PT academia (39.1%), and PT clinical (33.9%), and third for OT academia (28.2%). Assignment of teaching responsibilities based on coincidence with work assignment of clinical staff or on the basis of title/position ranked relatively low.

Survey Question: Rank the following recognition mechanisms used to acknowledge services of the clinical teaching staff by academia.

TABLE 54

RANKING OF THE RECOGNITION MECHANISMS FOR THE CLINICAL TEACHING STAFF BY ACADEMIA

	MT (%)		OT (%)		PT (%)		TOTAL (%)	
Responses	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Non-Salaried Faculty Appointment	73.7	46.8	46.2	37.8	54.7	46.6	60.0	44.3
Appreciation Acknowledgement	3.5	7.6	12.8	13.5	17.2	10.2	10.9	10.3
Listing in School's Catalogue	12.3	6.3	14.4	10.8	9.4	4.2	11.5	6.6
Appreciation Luncheon or Dinner	0.0	1.3	7.7	2.7	6.3	4.2	4.2	3.0
Salaried Faculty Appointments	5.3	25.4	5.1	20.3	1.6	20.3	3.6	21.8
Other	7.0	6.3	10.3	2.7	12.5	6.8	9.7	5.5
n =	57	79	39	74	64	118	160	271

As indicated in Table 54, the most frequently cited recognition mechanism acknowledging services rendered by the clinical teaching staff

was non-salaried faculty appointments (37.8 to 73.9%). Although only a minority (1.6 to 5.3%) of the educators indicated that providing salaried faculty appointments was a satifactory recognition mechanism, all the clinical administrators (20.3 to 25.4%) indicated that this recognition mechanism was desirable.

Table 54 indicates that the following recognition mechanisms were used infrequently: less than 20%--letters, certificates or plaques of appreciation; less than 15%--listing of clinical teaching staff in the school's catalogue; and less than 10%--appreciation luncheons or dinners.

Although there was a meaningful difference noted between MT academia (73.7%) and clinicals (46.8%), nevertheless, both types of program administrators chose non-salaried faculty appointments as their primary recognition mechanisms.

Survey Question: Rank the following concerns expressed by the clinical teaching staff.

TABLE 55

RANKING OF CLINICAL TEACHING STAFF CONCERNS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Increased Workload	54.4	64.6	43.6	66.2	40.6	72.9	46.7	68.6
Lack of Teaching Skills	14.0	7.6	25.2	5.4	37.5	6.8	24.2	6.6
Inadequate Compensation for Extra Responsibility	15.8	12.7	7.7	10.8	3.1	11.9	8.5	11.8
Lack of Appropriate Recognition	5.3	7.6	2.6	5.4	3.1	2.5	4.2	4.8
Other	5.3	1.3	7.7	4.1	3.1	1.7	4.8	2.8
n =	57	79	39	74	64	118	160	271

There was congruity among the program administrators (40.6 to 72.9%) that the primary concern expressed by the clinical teaching staff was increased workload responsibilities due to teaching and teaching-related activities. For OT academia (25.5%) and PT academia (37.5%), the lack of teaching skills was a secondary concern expressed by the clinical teaching staff.

Although there was agreement among the practitioners with regard to the primary concern expressed by the clinical staff, nonetheless, there were meaningful differences noted for OT academia (43.6%) and clinical (66.2%), and PT academia (40.6%) and clinical (72.9%). Inadequate compensation for additional responsibilities for the clinical staff (3.1 to 15.8%) and the lack of appropriate recognition (2.5 to 7.6%) were not identified as issues.

Survey Question: Rank the following affiliation benefits to the cinical facility as perceived by the administrators.

TABLE 56

RANKING OF PERCEIVED AFFILIATION BENEFITS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Minimize Cost of Recruiting and Advertising	54.4	39.9	25.6	28.4	50.0	36.4	46.7	35.1
Prestige Obtained Through Affiliation	17.5	19.0	33.5	14.9	25.0	15.3	23.6	16.2
Opportunity to Meet Institutions Mission	19.3	25.3	20.5	39.2	20.3	37.3	19.4	34.3
Other	5.3	2.5	7.7	8.1	6.3	6.8	6.1	5.9
n =	57	79	39	74	64	118	160	271

The primary perceived benefit of affiliation was the reduction of recruiting and advertising costs as indicated by MT academia (54.4%) and clinical (39.9%), and PT academia (50.0%). Although the opportunity to meet the institution's mission was noted as a primary benefit by OT clinical (39.2%) and PT clinical (37.3%), 33.3% of OT academia indicated that the prestige obtained through affiliation was their preference.

Survey Question: Who determines/should determine the numbers of students that are assigned to a particular clinical site?

TABLE 57

RESPONSIBILITY FOR DETERMINING STUDENT ASSIGNMENT NUMBERS

Responses	Practice	MT (%)		OT (%)		PT (%)		TOTAL (%)	
		Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
*Academic	Current	36.9	24.0	5.2	6.8	18.7	14.4	22.5	15.2
	Ideal	28.1	10.1	15.4	6.8	14.1	5.9	18.7	7.4
*Clinical	Current	22.8	55.7	64.3	89.2	54.7	61.8	46.7	67.8
	Ideal	28.0	68.3	61.6	86.5	54.7	76.2	46.7	77.0
Acad + Clin	Current	36.8	13.9	30.5	4.0	26.6	22.9	28.5	15.2
	Ideal	38.6	13.9	15.4	6.8	26.6	16.9	28.5	13.3
No Choice	Current	3.5	6.4	0.0	0.0	0.0	0.8	2.3	1.8
	Ideal	5.3	7.6	7.7	0.0	4.7	1.0	6.1	2.3
n =		57	79	39	74	64	118	160	271

*Primary Responsibility

For MT, the responsibility for determining the number of students that were assigned to a particular clinical site was either the responsibility of the educators (36.9%) or a joint responsibility (36.8%). For MT clinical (55.7%), OT academia (64.3%) and clinical (89.2%), and

PT academia (54.7%) and clinical (61.8%), this responsibility was the practitioners.

Although there were meaningful differences noted between OT academia (66.7%) and clinical (89.2%) regarding the practitioners being responsible for determining the numbers of students assigned to clinical sites, nevertheless, there was consensus. In the case of MT academia (22.8%) and clinical (55.7%), there was a meaningful difference noted. Overall, there was no agreement among MT academia regarding this responsibility as supported by the following data: educator's responsibility (36.9%), practitioner's responsibility (22.8%) and a mutual responsibility (36.8%).

Perceptual differences can be noted between the responses of all academic and clinical administrators regarding the practitioners determining the number of students assigned to a clinical facility: MT academia (28.0%) and clinical (68.3%), OT academia (61.6%) and clinical (86.5%), and PT academia (54.7%) and clinical (76.2%). Inspite of the OT and PT program administrator's perceptual differences, there was still concerns that this responsibility should be the practitioners. There was a meaningful difference noted between MT academia (36.8%) and clinical (13.9%) in terms of both educators and practitioners jointly assuming this responsibility.

Survey Question: When the administrators of the academic institutions delegate responsibility to the clinical facilities, is corresponding authority delegated?

TABLE 58

DELEGATION OF RESPONSIBILITY AND AUTHORITY

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Yes/Most of the Time	57.9	57.0	66.7	66.2	70.3	68.6	65.9	64.6
Sometimes	21.1	20.3	15.4	23.5	20.3	18.6	18.9	18.8
No/Never	5.3	11.4	2.6	1.2	3.1	6.8	3.7	9.6
No Choice	15.8	11.4	15.4	9.1	6.3	5.9	11.6	7.0
n =	57	79	39	74	64	118	160	271

The majority of the administrators of academia (57.9 to 70.3%) and clinical (57.0 to 68.6%) indicated that when academia delegated responsibilities to the clinical facility, authority was delegated as well.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

Summary

This national study was conducted to identify areas at issue in clinical education curriculum, ethical and legal, financial, and administrative concerns and practices as perceived by academic administrators of Medical Technology, Occupational Therapy and Physical Therapy programs and clinical administrators of facilities providing clinical education experiences to students from academia.

The following research questions served as a focus for the study:

1. Within the fields of Medical Technology, Occupational Therapy and Physical Therapy, what are the curricular issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical education?

2. Within the fields of Medical Technology, Occupational Therapy and Physical Therapy, what are the ethical and legal issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical education?

3. Within the fields of Medical Technology, Occupational Therapy and Physical Therapy, what are the financial issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical education?

4. Within the fields of Medical Technology, Occupational Therapy and Physical Therapy, what are the administrative issues as perceived by the academic program administrators and the administrators of clinical facilities providing clinical education?

All university-based Medical Technology, Occupational Therapy and Physical Therapy program administrators in the United States and administrators of twice as many clinical facilities which provided clini-

cal education to students from academia were surveyed. A total of 661 surveys were mailed with 221 sent to academia and 440 to clinicals.

For this study, the usable return rate was 65 percent with the following distribution: for Medical Technology programs, 80 percent academia and 56 percent clinicals; for Occupational Therapy programs, 72 percent academia and 69 percent clinicals; and for Physical Therapy programs, 67 percent academia and 62 percent clinicals (Appendix A). Most of the returns were completed by assistant or associate deans and program directors on behalf of academia, and by program directors, educational/clinical coordinators, and department heads/supervisors on behalf of the clinical facilities providing clinical education experiences to students from academia (Appendix B).

Descriptive statistical analyses were completed on the survey responses to determine the frequency and percent frequency distributions. The criterion used for identifying "meaningful" differences in the perception of academic and clinical program administrators was arbitrarly set at a minimum difference of twenty in the percent frequency between their responses to the survey questions. In instances where meaningful differences were noted, the item was considered at issue.

This chapter includes the conclusions and recommendations derived from the study.

Conclusions

The following conclusions are organized within the major areas of the study: curriculum, legal and ethical, finance, and administration.

Curriculum

1. Within the Medical Technology programs, the academic administrators and the clinical administrators were at issue on almost all of the curricular components.

For Medical Technology administrators, the areas at issue focused on the responsibilities associated with the establishment of goals and objectives, clinical learning activities, success criteria, assessment tools, assignment of clinical grades, and the assessment of the quality and effectiveness of the clinical education component. In addition, at issue were the criteria used for determining the content for clinical education.

2. Within the Occupational Therapy programs, the academic administrators and the clinical administrators were at issue on very few of the curricular components.

For Occupational Therapy administrators, the areas at issue focused also on the responsibilities associated with the establishment of success criteria, assessment tools, and the effectiveness of the clinical education component.

3. Within the Physical Therapy programs, the academic administrators and the clinical administrators were at issue on very few of the curricular components.

For Physical Therapy administrators, the areas at issue focused on the responsibilities associated with the assessment of the quality and effectiveness of the clinical education component, and the criteria used for determining the content for clinical education.

Discussion of Curricula Conclusions

Since academic/clinical interaction and cooperation are essential in health professions education, it is obvious that the degree of disagreement found implies the need for action to bring the academic and clinical component closer together. Recommendations for positive corrective measures must be based on a firm understanding of the reasons underlying the apparent perceptual discrepancies. The paucity of literature in the field necessitates some degree of speculation as to the reasons.

There are certain professional characteristics or attributes in which fields of Occupational Therapy and Physical Therapy are quite similar to each other and quite different from Medical Technology. These characteristics, although unpublished, are common knowledge among the health professions. Among these are the following, first, the Occupational Therapy and Physical Therapy each have one professional organization which represents a majority of the practitioners and educators in the field. The professional organizations address issues related to both education and clinical practice. In Medical Technology, there are numerous professional organizations, of which any one practitioner may hold membership in none, one or several; each of these organizations tend to deal with clinical practice issues in one of the several scientific specialty areas of laboratory medicine, or with clinical laboratory management. Secondly, in Occupational Therapy and Physical Therapy, the fact that one organization represents the profession seems to imply the authority as well as the responsibility to establish and maintain educational policies and standards for the fields

and to relate these to clinical practice. Occupational and Physical Therapy have well organized and detailed documents, generally accepted by the professional populations, that describe the professional body of knowledge, the scope of clinical practice, and the policies governing the educational process. Medical Technology by contrast, has few documents addressing these areas that have recently been developed and published by American Society for Medical Technology (ASMT). The documents have not been subjected to review for broad acceptance. Thirdly, in Occupational Therapy and Physical Therapy, the professional organizations are also directly involved in the accreditation of educational programs. In Medical Technology, there is one accrediting agency, National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) organized as a public entity with representation from numerous professional constituencies related to the clinical laboratory. As such, many vested interests are represented and strong, definitive stands are rarely taken in terms of the setting of unequivocal educational standards and policies. And, fourthly, the practice of Medical Technology is oriented toward clinical laboratory application of the chemical and biological sciences and/or operation of the clinical laboratory as a major fiscal service entity which provides quasi subsidies for others in the health care setting. The minimal patient contact involved in clinical practice attracts practitioners who are less oriented toward education and the social sciences. Patient care and patient education are not foremost among the medical technologist's direct responsibilities. Intraprofessional communication and the

education of students are also not perceived by many medical technologists as part of their professional function.

Ethical and Legal

1. Within the Medical Technology programs, the academic administrators and the clinical administrators were at issue on a majority of the ethical and legal practices.

For Medical Technology administrators, the areas at issue address four major practices: affiliation agreements, such as, the signature authorization and the reasons for maintaining affiliation agreements; liability coverages, that is, the clinical facilities providing coverage for academic faculty instructing students during clinical experiences, the clinical facilities requirement for students to carry malpractice coverage, and the locus of liability for student malpractice in delivery of professional services; patient's rights, that is, the right of the patient to be informed that services are being provided by a student; and, the responsibilities associated with monitoring the balance between the student's dual roles as learner and as provider of services in the clinical setting, for handling student grievances and/or complaints, and responsibilities for evaluating student professional competence.

2. Within the Occupational Therapy programs, the academic administrators and the clinical administrators were at issue on s majority of the ethical and legal practices.

For Occupational Therapy administrators, the areas at issue address the following practices: affiliation agreements, such as, academia's signature authorization, the reasons for maintaining an affiliation agreement and the sharing of affiliation agreements with students; liability coverages, that is, the clinical facilities providing coverage for students from academia and the locus of liability for

student malpractice coverage; and, the responsibilities associated with monitoring the balance between the student's dual roles as learner and as provider of services in the clinical setting, responsibilities for addressing student grievances, and responsibilities associated with evaluating student professional competence.

3. Within the Physical Therapy programs, the academic administrators and the clinical administrators were at issue on a majority of the ethical and legal practices.

For Physical Therapy program administrators, the areas at issue address the following practices: sharing of affiliation agreements with students; liability coverages, that is, the clinical facilities providing coverage for students and the locus of liability for student malpractice in delivery of professional services; patient's rights, that is, the right of the patient to be informed that services are being provided by a student; and, the responsibilities associated with monitoring the balance between the student's dual roles as learner and as provider of services in the clinical setting, for handling student grievances and/or complaints, and responsibilities for evaluating student professional competence.

Discussion of Ethical and Legal Conclusions

Several legal and ethical issues were listed as areas of disagreement or at least divergence of perceptions between academic and clinical administrators. In reality, these areas were probably more accurately described as areas in which policies were not clear and in which there has not been adequate communication between academic and clinical administrators. The most likely reason for the lack of focus on these

specific areas was that they have not become issues in litigation and the general consensus was that there was not much likelihood of their doing so in the near future (Appendices F and G).

Patient litigations were usually directed at physicians or nurses; litigation with students as plaintiffs were much more commonly seen in the high income fields, that is, medicine and dentistry. However, in recent years, suits have been more comprehensive in that they cite any and all professionals who may have been involved in the case.

Finance

1. Within the Medical Technology programs, the academic administrators and the clinical administrators were at issue on some fiscal concerns and practices.

For Medical Technology administrators, the areas at issue were the desirability for provision by academia of ancillary personnel to assist the clinical staff with student-related activities, and the identification of mutually acceptable remuneration mechanisms. In addition, fiscal matters were identified as potentially jeopardizing future clinical arrangements was identified as an issue.

2. Within the Occupational Therapy programs, the academic administrators and the clinical administrators were at issue on some fiscal concerns and practices.

For Occupational Therapy administrators, the areas at issue were the general concern for fiscal matters, provisions by academia of ancillary personnel to assist the clinical staff with student-related activities, and the identification of mutually acceptable indirect and direct remuneration mechanisms. Again, fiscal matters were indicated as potentially jeopardizing future clinical arrangements.

3. Within the Physical Therapy programs, the academic administrators and the clinical administrators were at issue on some of the previously identified fiscal concerns addressed in this study.

For Physical Therapy administrators, the areas at issue were the identification of mutually acceptable indirect and direct remuneration mechanisms. Also, fiscal matters were identified as potentially jeopardizing future clinical arrangements.

Discussion of Finance Conclusions

Responses regarding financial aspects of clinical education indicate that although there were few concerns at issue at this time, future fiscal practices may impact significantly upon clinical arrangements (Appendix G). Academic personnel seem to be much more sensitive to future financial concerns than do clinical personnel. It appeared from the study that the practitioners were less interested in payment for clinical instruction at the institutional level than they were in non-monetary forms of assistance such as the provision of academic personnel as ancillary clinical instructors, and various personal educational opportunities such as waiver of tuition for formal and/or informal courses offered by the academic institution.

Administration

1. Within the Medical Technology programs, the academic administrators and the clinical administrators were at issue on some of the administrative concerns.

For Medical Technology administrators, increased fiscal accountability, concerns regarding appropriate recognition mechanisms for the clinical staff's contributions toward clinical education, and the

responsibilities associated with student assignment and the responsibility for establishing policies governing clinical education were at issue.

2. Within the Occupational Therapy programs, the academic administrators and the clinical administrators were at issue on some of the administrative concerns.

For Occupational Therapy administrators, concerns expressed by teaching clinical staff regarding the lack of teaching skills and increased workload schedules due the presence of students in the clinical setting were at issue. In addition, the criteria used to assign teaching responsibilities to clinical staff and the lack of knowledge of the amount of time spent by the clinical staff on teaching and teaching-related activities were identified as concerns at issue. The responsibilities associated with student assignment and the establishment of policies governing clinical education were also identified.

3. Within the Physical Therapy programs, the academic administrators and the clinical administrators were at issue on some of the administrative concerns.

For Physical Therapy administrators, discrepancies regarding academia's sensitivity towards pressures exerted on the clinical facilities and disagreement of who has the responsibility for establishing the policies governing clinical education were identified as concerns at issue. In addition, a lack of awareness of the amount of time spent by the clinical staff on teaching and student-related activities, and the concerns expressed by teaching staff regarding the lack of teaching skills and increased workload schedules due to the presence of students were at issue.

Discussion of Administration Conclusions

General agreement among the administrative and clinical constituencies of all three professions was seen in almost all questions of an administrative nature included in the survey. The tone of the administrative section of the survey was of necessity rather general, and there was some overlap in item content with items of a fiscal and legal nature already included and discussed in other sections.

Areas identified as being deserving of present or future administrative concern were grouped into three areas. The first area included issues of intra-institutional accountability, that is, the clinical site supervisor's ability to justify within the clinical institution the continuation of sometimes costly education affiliation in an atmosphere of increasing fiscal accountability on health care (Appendix G). Clinical site staff, however favorably they may personally view their role in the educational process, are sometimes hard pressed to explain to their superiors that many of the benefits of clinical affiliation are intangible (Appendix G). Even when the benefits are tangible in terms of value received by the clinical site, they do not usually involve the direct exchange of money (Appendix E). Good communication and the maintenance of a favorable administrative climate are paramount to the success and longevity of a clinical affiliation. From the survey responses, it appears that clinical and academic personnel in all three professions were well aware of this.

A second area of administrative concern relates to matters of staffing within the clinical service units when educational activities were added to the service responsibilities of the staff. Clinical site

supervisiors may be called upon here to deal with a variety of concerns from staff including perceptions of increased responsibility for the same pay and of lack of preparedness to teach, that is, lack of training in the mechanics of transmitting skills and knowledge. A skilled administrator of clinical staff for whom teaching responsibilities have been added will be able to inspire his/her subordinates by offering them the intangible benefits of their educational efforts, and will also successfully negotiate with the academic institution for the provision by the latter of some benefits for the clinical teaching staff. Such benefits customarily include tuition waivers as discussed above and the provision on non-salaried faculty appointments.

The third area highlighted as being of administrative concern, was confusion as to responsibility for establishment of policies governing clinical education. These concerns were related to those previously discussed in the legal and ethical areas. The apparent lack of a formal policy and authority structure probably reflects the fact that the need to "fall back" on such a structure has never arisen. For example, there were still many aspects of the interactions of clinical and academic institutions that proceeded smoothly under the informal agreement, with continued success, enhanced by the good will and professionalism of all concerned.

Recommendations

Based on the findings of this study, the following recommendations are provided:

1. Although educational institutions should be responsible for the total education to ensure better integration of didactic and clinical education and sufficient breadth of clinical experiences, they must share the responsibility for planning, implementation, evaluation and management with their clinical affiliates through on-going joint planning activities.

2. Educational institutions and clinical facilities should collaborate, or reevaluate current collaboration arrangements, to increase integration and improvement of clinical and didactic instruction through procedures such as academic appointments for faculty responsible for planning and supervising clinical instruction or through joint planning session for the overall curriculum.

3. Written agreement should be formulated between the educational institution and each clinical affiliate for the purpose of delineating objectives, authorities, responsibilities and relationships.

4. Academia with collaboration of their clinical affiliates should develop guidelines, techniques or devices for evaluating the effectiveness of not only specific learning experiences but the overall clinical education experience.

5. Student's should receive preparation in ethical issues and in legal risk management, particularly patient's rights and practitioner's responsibilities toward the patient.

6. Since many of the challenges facing allied health apply to both the clinical and academic institutions, educators and practitioners should foster mutual appreciation and collaboration among the professions.

Recommendations for Further Study

1. There should be studies of allied health services and facilities which have terminated their clinical education affiliations with academic programs in order to identify the reasons for discontinuance of the affiliation.

2. There should be studies of the distribution of student and clinical staff time and effort for selected clinical education activities.

3. There should be studies addressing the effects due to the pressure of students in the clinical setting affecting clinical staff professional competency, productivity and motivation.

4. There should be studies exploring the strengths and weaknesses of patient services of clinical facilities affiliated with education programs.

5. There should be valid studies conducted to measure the direct and indirect costs incurred by the clinicals, and tangible and intangible benefits provided by academia to clinical facilities.

6. There should be studies conducted to determine the relative cost-effectiveness of different patterns of clinical education including different sequencing of clinical and didactic components.

7. Intensive research should be conducted to validate or modify existing standards for the amount and type of clinical experience required for program accreditation and/or practitioner certification.

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APPENDIX A

APPENDIX A

SAMPLE DISTRIBUTION

		Number Mailed	Number Returned	Number Usable	Percent Usable
MT	Academia	71	61	57	80
	Clinical	142	86	79	56
	Total	213	147	136	64
OT	Academia	54	41	39	72
	Clinical	108	80	74	69
	Total	162	121	113	70
PT	Academia	96	68	64	67
	Clinical	190	128	118	62
	Total	286	196	182	64
ALL	Academia	221	170	160	72
	Clinical	440	294	271	62
	Total	661	464	431	65

APPENDIX B

APPENDIX B

DESCRIPTIVE TITLE OF SURVEY RESPONDENTS FREQUENCIES

Responses	MT		OT		PT		TOTAL	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Dean	1	-	1	-	2	-	4	-
Assistant/ Associate Dean	51	-	26	-	33	1	110	1
Program Director	5	27	12	6	29	18	46	51
Educational/ Clinical Coordinator	-	22	-	18	-	58	-	98
Clinical Director	-	3	-	5	-	13	-	21
Assistant Clinical Director	-	4	-	1	-	7	-	12
Department Head/Supervisor	-	22	-	37	-	18	-	77
Senior Technologist/ Therapist	-	1	-	4	-	2	-	7
Staff Technologist/ Therapist	-	-	-	3	-	1	-	4
TOTAL	57	79	39	74	64	118	160	271

APPENDIX C

APPENDIX C

PROFILE OF RESPONDING CLINICAL INSTITUTIONS

Responses	MT	OT	PT	TOTAL
Government Hospital	23	27	31	81
Proprietary Hospital	53	38	85	177
Voluntary Hospital	1	1	-	2
Health Maintenance Organisation	1	1	-	1
Neighborhood Health Clinic	-	1	-	1
Physician's Office	1	1	2	4
School/Universities	-	5	-	5
TOTAL	79	74	118	271

APPENDIX D

APPENDIX D

ACADEMIC INSTITUTION PROFILE QUESTIONNAIRE

1. Type of Allied Health Program Responding (check off one):

   _____ (MT) Medical Technology
   _____ (OT) Occupational Therapy
   _____ (PT) Physical Therapy

2. Total number of OTHER Allied Health Programs contained within the academic unit or college:

   _____ (Please write in the number)

3. Descriptive title of the respondent:

   _____ Dean of the unit
   _____ Assistant/Associate Dean
   _____ Program Director
   _____ Educational/Clinical Coordinator
   _____ Other; please specify: _____

4. Type of institutional support (check off one):

   _____ Public
   _____ Private
   _____ Mixed

5. Program information (please write-in or check off your responses):

   _____ Total number of undergraduate students enrolled in the program.

   _____ Total number of undergraduate students participating in clinical activities per academic year.

   _____ Total number of clinical affiliates used for this academic year. (If an affiliate is used more than once, please consider it as just <u>one</u> affiliate.)

   _____ Total number of days students assigned to clinical affiliates per year. Calculate by multiplying (number of students) times (total number of clinical days).

   _____ Number of full-time equivalent academic faculty in your department.

CLINICAL INSTITUTION PROFILE QUESTIONNAIRE

1. Type of Allied Health Department Responding (check off one):

_____ (MT) Medical Technology
_____ (OT) Occupational Therapy
_____ (PT) Physical Therapy

2. Descriptive title of the respondent:

_____ Director of Department
_____ Associate/Assistant Director of Department
_____ Department Administrator/Manager
_____ Department Head/Supervisor
_____ Senior Technologist/Therapist
_____ Staff Technologist/Therapist
_____ Educational/Clinical Coordinator
_____ Other; please specify: _____

3. Type of institution responding: (Write in the number beds/persons served).

_____ Hospital: (If so, please indicate type of hospital:
_____ Governmental (federal, state or local)
_____ Proprietary (for profit, investor-owned, tax-paying)
_____ Voluntary (not-for-profit)
_____ Ambulatory Clinic
_____ (HMO) Health Maintenance Organization
_____ Home Health Care Agency
_____ Industrial Facility
_____ Medical Laboratory
_____ Neighborhood Health Clinic
_____ Nursing Home or other Extended Care Facility
_____ Physician's Office
_____ Schools or Universities
_____ Other; please specify: _____

4. Clinical affiliation information:

_____ Number of formal academic institution affiliation in your department. (If an academic institution sends students more than once; please count this as one affiliation.)

_____ Total number of students accepted in your department from all your academic affiliates.

_____ Total number of days students are assigned to your department per year. Calculate by multiplying (number of students) times (total number of clinical days).

_____ Do you have your own accredited professional program? (Yes or No)

PART A
DIRECTIONS:

Please circle your choice using the following key:
Y = Yes/Most of the time
S = Sometimes
N = No/Never

Y S N (1) Is there effective/productive communication between the clinical and academic institutions?

Y S N (2) Is(are) your affiliate(s) responsive to complaints and/or suggestions?

Y S N (3) Are academic institutions sensitive to the concerns and/or pressures exerted on the clinical institutions?

Y S N (4) Are student clinical placement avoided or minimized if the clinical site has its own program?

Y S N (5) Are your fiscal and personnel management options been limited by institutional cost containment efforts?

Y S N (6) When responsibility is delegated by the academic institution to the clinical institution, is corresponding authority delegated as well?

Y S N (7) Are credentials of the clinical staff considered prior to assigning teaching responsibilities at the clinical site?

Y S N (8) Are you aware of the average number of clinical staff hours spent per day on teaching activities?

Y S N (9) Are you aware of th me spent by teaching clinical staff on student-related activities (other than actual teaching)?

Y S N (10) Does the academic institution provide auxiliary teaching personnel to assist in the instruction of students at the clinical site?

Y S N (11) Should the academic institution provide auxiliary teaching personnel to assist in the instruction of students at the clinical site?

Y S N (12) Do the academic faculty "visiting" the clinical site actually participate in the instruction of students at the site?

Y S N (13) Do the academic faculty "visiting" the clinical site serve in more than a "liaison" capacity? (example: provides in-service activities)

Y S N (14) For this clinical rotation cycle, were financial matters of any concern to your institution?

DIRECTIONS:

Please circle your choice using the following key:
Y = Yes/Most of the time
S = Sometimes
N = No/Never

Y S N (15) Should the academic institution pay the clinical site for the clinical education of its students if tuition is charged?

Y S N (16) Should financial reimbursement be of concern if student's clinical assignment is of short duration, i.e., less than a total of 40 hours?

Y S N (17) Do you anticipate financial matters jeopardizing future clinical arrangements?

Y S N (18) Are students assigned to a clinical site required to carry professional liability insurance?

Y S N (19) Are students assigned to a clinical site automatically covered by the institution's professional liability insurance coverage.

Y S N (20) If academic faculty were instructing students at the clinical site, would they be covered by the clinical institution's professional liability insurance coverage?

Y S N (21) Do students receive and/or read a copy of the affiliation agreement?

Y S N (22) Should the affiliation agreements contain a statement that students have the status of learners and may not render service for patients' care beyond the scope of its educational value?

Y S N (23) Are students assigned to a clinical site required to wear a "patch" or an "ID" badge identifying them as a student?

Y S N (24) Have you ever terminated a clinical agreement (either party initiating the process) in advance of the specified termination date?

Y S N (25) In the last five years, have you or your department ever been involved in malpractice or negligence litigation?

Y S N (26) Have you or your institution ever been involved in malpractice or negligence litigation due to a student's misjudgment, error, conduct, etc.?

Y S N (27) Are any patient-generated revenues allocated for clinical educational activities?

Y S N (28) Are students paid stipends during their clinical rotations?

Y S N (29) Do student's learning activities in the clinical site provide any patient services?

Y S N (30) Are students at the clinical site introduced to patients and/or clients as "students" or "trainees"?

PART B
DIRECTIONS: Please check as many items as applicable for each question.

I. What are your reasons for maintaining an affiliation agreement?
_____ (1) To define duties and obligations of all parties concerned.
_____ (2) To meet institutional requirement(s).
_____ (3) To insure an awareness of established educational objectives.
_____ (4) To provide assurance of the availability of the site for clinical activities.
_____ (5) To protect student's rights.
_____ (6) To assist the clinical institution with proof of its participation in educational activities.
_____ (7) Other; please specify: _____
_____ (8) Other; please specify: _____

II. Who is authorized to sign the affiliation agreement on behalf of the academic institution?
_____ (9) Legal Counsel
_____ (10) President of the School/College
_____ (11) Dean
_____ (12) Department Chairman
_____ (13) Educational Coordinator
_____ (14) Don't know
_____ (15) Other; please specify: _____

III. Who is authorized to sign the affiliation agreement on behalf of the clinical institution?
_____ (16) Legal Counsel
_____ (17) President/Administrator
_____ (18) Medical Director
_____ (19) Department Head
_____ (20) Clinical Educational Coordinator
_____ (21) Don't know
_____ (22) Other; please specify: _____

IV. Which of the following elements should be included in an affiliation agreement?
_____ (23) Malpractice coverage
_____ (24) Financial concerns and arrangements
_____ (25) Mechanism for resolving disputes
_____ (26) Process for terminating agreements
_____ (27) Rights and responsibilities of the academic and clinical institutions
_____ (28) Rights and responsibilities of the student
_____ (29) Number of students assigned during a designated period
_____ (30) Don't know or care
_____ (31) Other; please specify: _____

V. What are the sources of cost containment pressures at your facility?
_____ (32) Respondent's own institution
_____ (33) Third party payers
_____ (34) Local government
_____ (35) State/Federal government
_____ (36) Don't know
_____ (37) Other; please specify: _____

PART C
DIRECTIONS: For each item, please circle the letter corresponding to your perceptions, using the following key.

A = Academic Institution, only
B = Academic Institution with input from the Clinical Institution
C = Clinical Institution, only
D = Clinical Institution with input from the Academic Institution
E = Collaboratively (Academic and Clinical Institutions)
F = Not Considered or Does Not Apply

This section describes current practices:

A B C D E F (1) Who establishes the policies governing the clinical component?

A B C D E F (2) Who determines the clinical rotation goals and objectives?

A B C D E F (3) Who determines the clinical rotation specific learning activities?

A B C D E F (4) Who determines the duties and extent of authority of the clinical teaching staff?

A B C D E F (5) Who develops the clinical assessment/evaluation tools for the clinical component?

A B C D E F (6) Who determines the clinical rotation success criteria or standards

A B C D E F (7) Who evaluates student's performance at the clinical site?

A B C D E F (8) Who assigns the grade for the clinical component?

A B C D E F (9) Who is responsible for addressing the clinical experience grievances/complaints regarding instruction and/or evaluation?

A B C D E F (10) Who is responsible for assessing the quality and effectiveness of the clinical rotation?

A B C D E F (11) Who assigns student(s) to a particular clinical site?

A B C D E F (12) Who determines the number of students that are assigned to a particular clinical site?

A B C D E F (13) Who monitors student's activities to insure that students are not exploited?

A B C D E F (14) Who pays the administrative costs of clinical teaching staff to coordinate the clinical activities?

A B C D E F (15) Who pays the salaries of the clinical teaching staff when students are assigned to a clinical site?

A B C D E F (16) Who pays for the commodities and/or supplies used for teaching purposes at the clinical site?

DIRECTIONS: For each item, please circle the letter corresponding to your perceptions, using the following key.

A = Academic Institution, only
B = Academic Institution with input from the Clinical Institution
C = Clinical Institution, only
D = Clinical Institution with input from the Academic Institution
E = Collaboratively (Academic and Clinical Institutions)
F = Not Considered or Does Not Apply

A B C D E F (17) Who pays for the maintenance costs of the equipment and instruments used by students at the clinical site?

A B C D E F (18) Who pays for the repair expenses of equipment and instruments used by students at the clinical site?

A B C D E F (19) Who received the student's tuition while s/he is on clinical assignment?

A B C D E F (20) Who is responsible for insuring clinical professional competence attained by students?

A B C D E F (21) Who is legally liable for the injury or wrong suffered by a patient in the course of the clinical training?

A B C D E F (22) Who is responsible for student discipline while students are assigned to a clinical site?

This section describes what you believe the <u>practices should be</u>:

A B C D E F (23) Who should establish the policies governing the clinical component?

A B C D E F (24) Who should determine the clinical rotation goals and objectives?

A B C D E F (25) Who should determine the clinical rotation specific learning activities?

A B C D E F (26) Who should determine the duties and the extent of authority of the clinical teaching staff

A B C D E F (27) Who should develop the clinical assessment/evaluation tools for the clinical component?

A B C D E F (28) Who should determine the clinical rotation success criteria or standards?

A B C D E F (29) Who should evaluate student's performance at the clinical site?

A B C D E F (30) Who should assign the grade for the clinical component?

DIRECTIONS: For each item, please circle the letter corresponding to your perceptions, using the following key.

A = Academic Institution, only
B = Academic Institution with input from the Clinical Institution
C = Clinical Institution, only
D = Clinical Institution with input from the Academic Institution
E = Collaboratively (Academic and Clinical Institutions)
F = Not Considered or Does Not Apply

A B C D E F (31) Who should be responsible for addressing the grievances/ complaints regarding instruction and/or evaluation?

A B C D E F (32) Who should be responsible for assessing the quality and effectiveness of the clinical rotation?

A B C D E F (33) Who should assign student(s) to a particular clinical site?

A B C D E F (34) Who should determine the number of students that are assigned to a particular clinical site?

A B C D E F (35) Who should monitor student's activities to insure that students are not being exploited?

A B C D E F (36) Who should pay the administrative costs of clinical teaching staff to coordinate the clinical activities?

A B C D E F (37) Who should pay the salaries of the clinical teaching staff when students are assigned to a clinical site?

A B C D E F (38) Who should pay for the commodities and/or supplies used for teaching purposes at the clinical site?

A B C D E F (39) Who should pay for the maintenance costs of the equipment and instruments used by students at the clinical site?

A B C D E F (40) Who should pay for repair expenses of equipment and instruments used by students at the clincial site?

A B C D E F (41) Who should receive the student's tuition while s/he is on clinical assignment?

A B C D E F (42) Who should be responsible for insuring clinical professional competence attained by students?

A B C D E F (43) Who should be legally liable for the injury or wrong suffered by a patient in the course of the clinical training?

A B C D E F (44) Who should be responsible for student discipline while students are assigned to a clinical site?

PART D

DIRECTIONS: Please rank the items in each of the following sections by placing a "1" in front of the most important or significant response; "2", for the second most important; "3", etc.

I. Factors affecting allied health care delivery systems:

_____ (1) Rapidly increasing technology
_____ (2) Limited financial resources
_____ (3) Increased accountability measures
_____ (4) Increased litigation implications
_____ (5) Increased governmental and other regulatory agencies pressures
_____ (6) Other; please specify: _____

II. Basis for assigning teaching responsibilities to clinical staff:

_____ (7) Title/Position
_____ (8) Credentials (certification, registration, license, degree)
_____ (9) Experience
_____(10) Expressed teaching interest
_____(11) Teaching assignment coincides with work assignment
_____(12) None
_____(13) Other; please specify: _____

III. Rationale for incorporating clinical rotations into academic curricula:

_____(14) To provide an opportunity of transferring classroom acquired knowledge to "real-world" settings.
_____(15) To provide patient/client contacts
_____(16) To provide supplemental work with equipment and/or instruments not available at the academic institution.
_____(17) Other; please specify: _____

IV. Rationale used in determing content of the clinical activities:

_____(18) Criteria dictated by professional organization's STANDARDS OR ESSENTIALS.
_____(19) Previously established goals and objectives.
_____(20) Availability of physical resources.
_____(21) Availability of human resources.
_____(22) Other; please specify: _____

V. Type of affiliation agreement which is most suitable to your institutional needs:

_____(23) Verbal (Gentlemen's Agreement)
_____(24) Business letter
_____(25) Memorandum of Understanding
_____(26) Formal contract
_____(27) Other; please specify: _____

VI. Academic institution recognition mechanisms for clinical teaching staff:

_____(28) Salaried faculty positions
_____(20) Academic clinical faculty appoint (no salary dollars, only privileges)
_____(30) Letter, certificate or plaque of appreciation or recognition
_____(31) Listing of the clinical teaching staff in the "school" catalogue
_____(32) Appreciation luncheon or dinner
_____(33) Other; please specify: _____

VII. Concerns expressed by clinical teaching staff:

_____(34) Inadequate compensation for additional responsibilities.
_____(35) Lack of appropriate recognition
_____(36) Increased workload responsibilities due to teaching and teaching-related activities
_____(37) Inadequacies due to lack of teaching skills or teaching orientation
_____(38) Other; please specify: _____

VIII. Perceived benefits to clinical site as a result of the affiliation:

_____(39) Opportunity to meet institution's mission
_____(40) Prestige obtained through the affiliation
_____(41) Minimizes cost of recruiting and advertising
_____(42) Other; please specify: _____

IX. "Equitable" financial reimbursement mechanisms:

_____(43) Academic site paying a mutually acceptable "token" amount
_____(44) Academic site covering supply and commodities expenses incurred by student instruction
_____(45) Academic site reimbursing proportionate clinical staff salary expenses
_____(46) Academic site reimbursing proportionate tuition dollars
_____(47) Other; please specify: _____

X. Acceptable non-monetary reimbursement mechanisms:

_____(48) Purchase of instruments/equipment for clinical department
_____(49) Subscription to journal(s)
_____(50) Purchase of textbook(s) for clinical department
_____(51) Payment of professional membership for clinical teaching staff
_____(52) Reimbursement of continuing education expenses for clinical teaching staff
_____(53) Tuition reimbursement of academic courses
_____(54) Other; please specify: _____

XI. Administrative challenges facing the clinical institutions:

_____(55) Difficulties in justifying benefits or merit of affiliation
_____(56) Increased pressures for fiscal accountability
_____(57) Increased litigation awareness of consumers
_____(58) Increased curricular accountability by academic institutions
_____(59) Other; please specify: _____

PART E

DIRECTIONS: Please respond to this "REIMBURSEMENT MECHANISM" section ONLY if the academic institution reimburses the clinical institution. Read all the questions in this section prior to responding. Then, check off the most appropriate response.

1. Is reimbursement based on a percentage (proportionate) clinical teaching staff's salary?

___ No
___ Yes

___ 1 - 10%
___ 11 - 20%
___ 21 - 30%
___ 31 - 40%
___ 41 - 50%
___ 51 - 60%
___ 61 - 70%
___ 71 - 80%
___ 81 - 90%
___ 91 - 100%

2. Is reimbursement based on a percentage of expenses for commodities and supplies used in the teaching process?

___ No
___ Yes

___ 1 - 10%
___ 11 - 20%
___ 21 - 30%
___ 31 - 40%
___ 41 - 50%
___ 51 - 60%
___ 61 - 70%
___ 71 - 80%
___ 81 - 90%
___ 91 - 100%

3. Is reimbursement based on a percentage of calculated costs incurred per student per rotation?

___ No
___ Yes

___ 1 - 10%
___ 11 - 20%
___ 21 - 30%
___ 31 - 40%
___ 41 - 50%
___ 51 - 60%
___ 61 - 70%
___ 71 - 80%
___ 81 - 90%
___ 91 - 100%

4. Is reimbursement based on an agreed-upon "token" amount irregardless of the number of students assigned to a clinical rotation site?

___ No
___ Yes

___ $ 1 - 100
___ 101 - 200
___ 201 - 300
___ 301 - 400
___ $401 - 500
___ 501 - 600
___ 601 - 700
___ $701 - 800
___ 801 - 900
___ 901 - 1000
___ $1000+

5. Is reimbursement based on a agreed-upon "token" amount times the number of students assigned to a clinical rotation site?

___ No
___ Yes

___ $ 1 - 100
___ 101 - 200
___ 201 - 300
___ 301 - 400
___ $401 - 500
___ 501 - 600
___ 601 - 700
___ $701 - 800
___ 801 - 900
___ 901 - 1000
___ $1000+

6. Is reimbursement based on a percentage of the tuition paid by student to the academic institution?

___ No
___ Yes

___ 1 - 10%
___ 11 - 20%
___ 21 - 30%
___ 31 - 40%
___ 41 - 50%
___ 51 - 60%
___ 61 - 70%
___ 71 - 80%
___ 81 - 90%
___ 91 - 100%

7. Other; please specify: _____

8. If you have more than one affiliation, are all reimbursements handled in the same fashion?

___ No
___ Yes
___ Not Applicable

THANK YOU VERY MUCH.

APPENDIX E

APPENDIX E

PROFILE OF ACADEMIC INSTITUTION SUPPORT FREQUENCIES AND PERCENTAGE

Responses	MT		OT		PT		TOTAL	
	#	%	#	%	#	%	#	%
Public	43	75.4	25	64.1	43	67.2	111	69.1
Private	12	21.1	12	30.8	19	29.7	43	27.3
Mixed	2	3.5	2	5.1	2	3.1	6	3.6
TOTAL	57	100.0	39	100.0	64	100.0	160	100.0

APPENDIX F

APPENDIX F

RANKING OF THE FACTORS AFFECTING ALLIED HEALTH CARE SYSTEMS

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Limited Financial Resources	47.4	37.9	66.8	37.8	32.8	28.8	50.3	31.7
Rapidly Increasing Technology	24.6	25.3	10.1	9.5	26.6	16.1	20.0	17.3
Increased Governmental and Regulatory Pressures	21.1	29.1	12.8	23.0	18.8	44.1	17.6	33.9
Increased Accountability Measures	5.3	5.1	10.3	27.0	14.0	6.8	8.5	13.8
Increased Litigation Implication	1.6	1.3	0.0	2.7	3.1	2.5	1.2	2.2
Other	0.0	1.3	0.0	0.0	4.7	1.7	2.4	1.1
n =	57	79	39	74	64	118	160	271

APPENDIX G

APPENDIX G

RANKING OF CLINICAL INSTITUTION ADMINISTRATIVE CHALLENGES

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
Increased Fiscal Accountability	66.7	38.0	53.8	37.8	50.5	44.9	57.0	41.0
Difficulties in Justifying Merits of Affiliation	14.0	30.4	17.9	29.7	14.1	21.2	15.2	26.2
Increased Curricular Accountability	8.8	7.6	5.1	10.8	15.6	18.6	10.3	13.3
Increased Consumer Litigation Awareness	10.5	2.5	0.0	4.1	3.1	9.3	1.2	5.9
Other	1.8	3.8	2.6	2.7	1.6	1.7	1.8	2.6
n =	57	79	39	74	64	118	160	271

APPENDIX H

APPENDIX H

SOURCES OF COST CONTAINMENT

Responses	MT (%)		OT (%)		PT (%)		TOTAL (%)	
	Acad	Clin	Acad	Clin	Acad	Clin	Acad	Clin
State/ Federal Government	64.9	59.2	69.2	71.6	45.3	59.3	58.2	62.7
Third Party Payers	12.3	46.8	12.8	62.2	4.7	72.9	9.1	62.4
Local Government	3.5	15.2	7.7	29.7	4.7	29.7	4.8	29.7
Do No Know	3.5	6.3	7.7	2.7	6.3	5.1	5.5	4.8
Other	3.5	5.1	5.1	5.4	3.1	7.6	3.6	6.3
n =	57	79	39	74	64	118	160	271

APPENDIX I

APPENDIX I

PROFILE OF REIMBURSEMENT MECHANISMS

(Data from the Survey Questionnaire Part E)

1. Reimbursement based on clinical teaching staff salaries:

1 MT Clinical	=	(21-40%)
1 MT Academic	=	(41-60%)
1 MT Academic	=	(61-80%)

2. Reimbursement based on commodities and supplies expenses:

1 MT Academic	=	(41-60%)
1 MT Clinical	=	(61-80%)

3. Reimbursement based on calculated costs per student:

None

4. Reimbursement based on a token amount, regardless of student numbers:

2 MT Academic	=	Yes, only
2 MT Clinical	=	Yes, only
1 MT Clinical	=	($ 1 - 200)
1 MT Academic	=	($201 - 400)
4 MT Academic	=	($1000+)
1 MT Clinical	=	($1000+)

5. Reimbursement based on a token amount per student:

1 MT Academic	=	Yes, only
1 MT Academic	=	($ 1 - 200)
1 MT Clinical	=	($ 1 - 200)
1 MT Clinical	=	($201 - 400)
1 MT Academic	=	($401 - 600)
1 MT Academic	=	($1000+)

6. Reimbursement based on the percentage of tuition paid to academia:

1 MT Academic	=	Yes, only
1 MT Academic	=	(21-40%)
1 MT Clinical	=	(21-40%)
1 MT Academic	=	(61-80%)
1 MT Clinical	=	(61-80%)
1 MT Academic	=	(81-00%)

APPROVAL SHEET

The dissertation submitted by Karina S. Srugys has been read and approved by the following committee:

Dr. Max Bailey, Director
Associate Professor, School of Education, Loyola

Dr. Karen Gallagher
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctorate of Education.

December 12, 1983
Date

Max Bailey
Director's Signature